

Grass Roots

Craft and self-sufficiency

For down to earth people

Hay

AUST \$3.50

Australian and
New Zealand Edition

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AUGUST 1987

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Polenta

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Conveyancing

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Coiled Baskets

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Game Birds

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Home
Hydro-Electricity

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Greenhouses

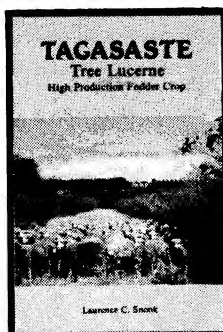
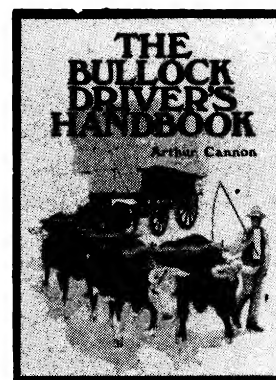


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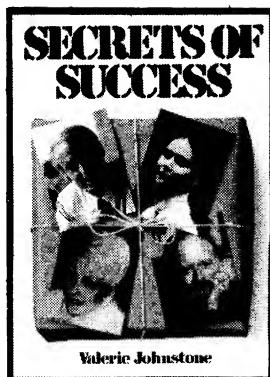
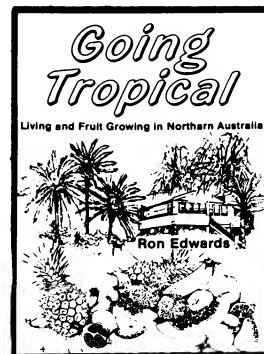
Growing Nuts in Australia
Anthony Allen
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Arthur Cannon
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Val Johnstone
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John Mason
 If you have ever thought of earning some extra money from your gardening interest then you will love this book. It describes how to start a plant business, discusses management, propagation, herb production and herbal products.
 p/b 135 pp
 \$8.50 post paid



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Feedback Link-Up Feedback	4,84
Water — Our Precious Liquid	
God Bless the Water	Cheryl Westbrook 14
The Right to Draw Water	Sue Jenkins 16
Turn Off That Tap	Megg Miller 17
Durable Coiled Baskets from Grass	Jose Robinson 18
Nutritional Needs of the Female	20
Sapling Fences	Jack Perry 22
Cottage Gardens	Megg Miller 23
Starting off with Bees	Brian Brett 25
Do It Yourself Conveyancing	J. Thomas 27
Home Hydro-Electricity	Don Lawie 28
Tears in the Mortar	Marly Wright 31
The Great Take-Over	Lolo Houbein 33
Winter Woolcrafts	
Sheepskin Boots or Slippers	Kathleen 35
Using up Old Socks	Angela Sidebottom 35
Making Sheepskin Bootees	Helen Ryan 36
Handweaving and Spinning Guilds	37
Generators	Robin and Anne Hughes 38
Chock and Log Fence	Sam Harris 39
WWOOF	
Practical Organic Education in Australia	L. Pollard 40
Working with WWOOF	Steve and Carol Smith 40
Natural Goat Care	Pat Coleby 41
Cryptic Grassword	M. Riley 42
Game Birds	Megg Miller 51
Agro Forestry Update	Irene Maxwell 53
Poetry	54
Kids Pages	56
While the Billy Boils	58
Polenta	Maria Gallo 59
Making a Bullock Harness	Arthur Cannon 60
Growing Firewood	63
Greenhouse Management	John Mason 65
Keeping Sheep on a Small Acreage	Peter Tuckerman 67
A 12V Electricity System	Nevin Sweeney 68
The Gentle Art of Spending Money	Juliet Summers 69
The Seed Bank	Jeff Hodges 70
Down Home on the Farm	David Miller 72
Grassifieds	74
Information Available	82
Gumnut Gossip	Megg Miller 90

Front: Working towards self sufficiency means making the most of everything you have and that includes the felled timber on your block. Often bush or regrowth has to be cleared before a house can be erected, and what better way to utilise this than in fences and gates. Ron, Bronwen and Raphael Roberts pictured next to their homemade gate. Photo courtesy John Archer.

Back: Yes, the pet steer that no one can bear to part with can become productive. Arthur Cannon's article on page 60 tells how to make your own bullock harness and put your beast to work for you. This photo shows Ember and Laddie under the guidance of Norm Stray working a wheat grinder at Nyerimilang National Park, Victoria. Photo courtesy Jan Crawford.

Distributed to newsagents by Gordon & Gotch.

Feedback Link-Up Feedback

Hi Everybody,

We — Gerald, Heather, Erin-Kelly (5) and Kaden (3) — were wondering if there are any GR families in the Seymour area of Victoria? We are moving there in October 1987 and would like to meet you with the view of giving you a hand with any work — building fences, mudbricks, sheds, outhouses, digging, planting etc. For more information please write to address below as mail will be redirected until October 1988.

The Hanley Family
51 Sharon Cres
KELSO 4815.

Dear Meg and David,

We have those few acres in the country as well as our city home. Last year my husband had an operation and hence he lost his job. We had two months of him getting well and six months on benefits (the dole). His new job lasted 10 weeks. So it's back to benefits as one needs an income just to get by. We realise John will be in and out of work until he retires because of his age. To budget on benefits has been a shock to the system. The short cuts on food don't seem that good anymore and I hate cooking, my chocolate biscuits turn out like rocks. Do readers have any good ideas for making meals go that extra mile? I would also like recipes for muesli bars and chutney.

I have been doing a Christmas tree for children in need for 9 years with the 'Home Makers Service'. I created hundreds of material toys over the years, and now have taught myself to knit. The knitted ones are so popular with the children, but I don't have many patterns. I would be interested in receiving other ideas that have made children happy.

John and Denise Lincoln
8 Annette St
TINGALPA 4173.

Dear GR Readers,

We are a family with our own accommodation, practical experience in MUDBRICK BUILDING and plenty of time to look and travel. We'll be heading off this winter, in which direction is still open. We've built our house and would like to know more of other owners building in other areas. We offer ideas and labour for our keep and a place to park our caravan. Looking forward to hearing from you.

John
C/- 34 Fugosla Street
DOVETON 3177.



Edited by Megg Miller and Kath Harper.

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SHEPPARTON 3630.

Grass Roots is produced for those who wish to regain control over their lifestyle by exploring the alternatives to modern mass consumption. Whether you've just started out or you're an old hand, why not share your experience and knowledge with other readers of Grass Roots. All contributions of articles and photos are welcome.

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Dear Fellow GR's,

As I have only been reading GR since 1983, I recently purchased back copies and came across information regarding the making of stove black (B. and M. Holland, Kingston, GR 35 Feedback Link Up).

In the recipe it mentions that BITUMEN may be obtained from a service station. This product is usually stored at a temperature of approx 200° C. The only places the product would be available from is an asphalt plant such as Bitupave or Hawkins (Newcastle area as an example). I must stress that hot bitumen can and will burn the skin, also it is explosive if it comes in contact with water in its hot liquid state.

Kevin Parsons
34 Kline St
WESTON 2326.

Ms. Grass Roots,

In GR 60 Bridget asked for suggestions to help her dog with fungal growths in the ears. Try a few drops of vinegar to change the pH. Once their environment has been polluted they have to go bush the same as the rest of us. If that fails try the reverse — a little baking soda in water maybe.



John Hodson
GUNNS PLAINS 7315.

Dear Friends,

Has anyone any information on where I could buy a MANUAL FRUIT JUICER? I've only seen one, it had 2 outlets (one for roughage and one for juice) and was imported from South America, but I've been told there is a trade embargo on them. Any help will be great.

Penny Miller
28 Pickering St
BROMPTON 5007.

Tene Koutou NZ GR People,

People who seek their lifestyle with GR say this magazine is most rewarding for such benefit, we find we cannot wait for the next issue and thanks to you all, keep up the good work.

We brought our dream of 5 acres 3 years ago in the most beautiful country with a permanent river and we worked very hard with our hands, knees and sore backs to clear the homestead. We planted fruit and nut trees and we took a gamble to have a vegie garden because the beautiful birdlife now and then have a go at pruning and of course I go mad, but I haven't given up yet. We would love to have chooks and a couple of goats so as to be semi self-sufficient. But not all dreams come true, it died sooner than we expected. We now have to sell up because of the FAMILY commitments in NZ. I have lived in Australia for nearly 20 years now and we have had bad and happy times in Aussie and we know we will be just as happy again. What we would like is to communicate with GR families in NZ, to start a new life, mainly in N.I. with my husband and our two children 12 and 10. We are interested in buying land with water, schools, shops, employment and tennis courts. We love reading, bike riding making crafts, cooking, massage, visiting friends, camping, bush walking, making clothes and we have done two hangi's. If there's anyone over there who could help us, please write.

Garry and Whiti Edward
'Whiti Te-Ra'
DAIRYVILLE 2450.

Dear GR Readers,

I am writing this letter as my husband, three children (5, 3, 1) and I are still travelling after 18 months. We have reached Broome and hope to be in the Northern Territory in the near future. We would LIKE TO MEET any GR people along the way and perhaps lend a helping hand for a day or two in exchange for somewhere to park our caravan. It would be great to exchange ideas and hopes as we will be building our own home when we get back to Axedale, Vic., where we are joint owners of a 42 acre property.

Mr Frank Harmer, a few months back I sent two letters to you re: free camping and caravanning ideas and other tips but they were both returned to me 'unknown at address'. Could you please contact me and let me know of a few ideas as to travelling in NT, Qld and NSW?

Does anyone know how I can get rid of WEAVILS once they are in flour and rice? Also is BREAD IMPROVER harmful and what do I use instead if it is? Lastly, where can I buy a *Whole Earth Catalogue*?

Mary and Michael Hipwell
C/- 25 Golfhill Ave
DONCASTER 3108.

Feedback Link-Up Feedback

Dear GR,

While at a garage sale I picked up a copy from 1983 and in 'Gumnut Gossip' there was a mention for people living in CENTRAL QUEENSLAND to write in, I know I'm a bit late but I thought I'd drop you all a line anyway.

My boyfriend Darren and our three cattle dogs and I moved here in March 1986 from Newcastle to work in sapphire mines. Well after a few months we realised we were still in 'suburbia' (of sorts) and found a mining claim with a house at 'Reward' (about seven kilometres from Rubyvale). We are out in the bush with no power etc. but are very happy. In between Darren's work as a concreter we find digging sapphires very satisfying and at times a profitable sideline. One of the first things to amaze me about sapphires was the variety of colour to be found, being city people we thought all sapphires were blue. There are also green, yellow, parti-colours, star sapphires and other stones as well.

But more about the way we live. We have a combustion stove and also a shellite stove. I would never have thought a combustion stove would turn out to be the best stove I ever owned. I really love cooking with it, with no shortage of firewood it costs us nothing. We also have two more fireplaces for winter warmth. We use a kero fridge and a gas freezer. Our shower at the moment is a five gallon bucket with a shower nozzle attached, we will have our 'Donkey' set up soon, I can't wait, hot running water at last. Our toilet is a septic system which is something of a luxury here. We run our light and TV off a battery, but will make the move to solar one day. My washing machine is turned by hand, but I intend to remedy that by attaching a push bike. A good way to keep fit at the same time.

The land here isn't prime grazing land but our goats are going along happily. We have one milking goat and two young females, two young meat goats and one wether I hope one day to train to pull a cart. If there is anyone with any experience on TRAINING GOATS for carts I would love to hear from you.

We keep some 20 hens and a rooster, they keep us in eggs and we sell surplus. We have half a dozen young roosters for our table, with more on the way. We also keep pigs, a boar, sow and three piglets for future meat. With fences planned for the immediate area around the house I should be able to start a vegie garden and plant trees. It is impossible to grow anything with chooks and goats on the march. Our cattle dogs consist of a male red Smithfield and two blue bitches. One of our bitches, Gemma, is about to have her first litter and our other one had her first a few months ago. It is very exciting and I can't wait to see what they turn out like. We intend to keep breeding them as we both love cattle dogs.

Our ultimate goal is to be in a position to buy around 100 acres in northern NSW. We both love the area and we will be able to extend our self-sufficiency. But that's in the future. For now we will keep trying to save for our dream, although there are a lot of setbacks we know we will make it. We also hope that all of you make it too. If anyone would like to DROP US A LINE we would love to hear from you. Keep smiling.

Jullanne Clarke and Darren Rae
C/- Post Office
SAPPHIRE 4702.

Dear GR Folk,

Hello to you all from Southern Tasmania, we are a family of four who are writing in the hope of meeting other TASMANIAN GR type people. We enjoy doing most things and are asking for nothing but friendship and the opportunity of meeting like minded people. Age is not important to us, neither is where you live, so long as you enjoy living simply and are not a whinger. So come on Tasmanians say hello, we are waiting to hear from you!

Paula and John Nowicki
Yandiah Cottage
PRIMROSE SANDS 7173.

Dear GR People,

We have finally got our ten acres and house, after a long time of wanting. For those of you still looking and wishing, don't give up, you'll get there, sometimes we felt like giving up, but hung in there and we've made it! Now we'd LIKE SOME CONTACTS view encouragement, discussion, new ideas and info. As we have moved here from another area, anyone in this area especially welcome, but so are all of you.

Robyn, Russell, Jarrad and Jamie Cornish
R.D.I. Dannevirke
HAWKES BAY NZ.

Dear Grassroots,

I am a 32 year old woman who enjoys living in one of Melbourne's inner suburbs. I am married with two sons (3 years and 8 months) and two step children, a girl 9, and boy 10, who spend most weekends and holidays with us. I work three days a week. My interests include cooking, reading, the peace movement, the protection of the environment, gardening and I am trying to develop my skills in sewing and knitting. I've just been told by the rest of the family that their interests are ice hockey, brownies, sports, music, bush walking, surfing, frogs, lizards, tigers and monsters. When pressed they admitted liking painting, books and craft.

I would like to make CONTACT with women with children living on the land who I could exchange letters, ideas, recipes, visits and holidays with. I'd particularly like to hear from someone who has knowledge and respect for aboriginal customs. So, if you are interested in gaining city cousins for your children and can tolerate people who have almost no knowledge of country life. I would be very pleased to hear from you.

Dayle Kalve
5A Normanby St
PRAHRAN 3181.

Dear Grass Roots Readers,

We first discovered GR in April 1986, when a friend suggested we read it as he knew we would be interested. We have not since missed an issue. It is nice to think that there are people around that think along the same lines as us. We are from the small mining town of Broken Hill NSW. At the time that our friend told us about GR we were working in a small engineering workshop we had put together, trying to rake up enough money to buy some land and set ourselves up but not really knowing exactly where nor how. GR has shown us how, since reading GR we have learnt of contacts and methods.

We have since sold our workshop and bought a few acres of land in Far North Queensland. We are also negotiating to build ourselves a selfsufficient, yurt style home. All have been contacts through GR. We are at present trying to sell our home in Broken Hill then we (my wife and two young sons one 5 years and the other 6 months) are off to fulfill our life long dreams. We would like to hear from other families in NORTH QUEENSLAND that have done or are doing the same sort of thing.

Dean and Pat Vella
PO Box 350
BROKEN HILL 2880.

Dear Meg, David and Readers,

After several years of both working, and frugal living, we finally saved enough money to buy into our dream, similar to most of you. We are now, the proud owners of a ten acre property in a secluded valley in the Adelaide Hills. And whilst we would love to drop out of the system, there is a long way to go yet. Rural living on a small allotment such as ours can be a wonderful lifestyle but does not generate enough income to make capital improvements such as fencing, alternative power, watering systems and the like. One day we may make it. We have the usual coloured sheep, fowls, fruit trees and a goat, together with a few cut flowers. It all feels so soul-cleansing. So best of luck those of you still working your way to your goal.

I seem to remember that sometime ago there were details given in a letter or advertisement regarding EYE TRAINING, so that glasses would not be needed. As age has caught up with me, and I am having difficulty reading, although other sight (distance) is good, can anyone help? In another publication, an effluent system called 'SEWPADISC' recycler was mentioned but no details given. Has anyone had any experience with these? I welcome any letters.

Barry Tilley and Ruth Trigg
Box 106
MONTACUTE 5134.

Dear Readers,

Help! We have a beautiful, lush, natural block of land with loads of BLACKBERRIES. Everyone says to spray them, I do not want to use a toxic spray. Some have said to slash, burn or dig them out. There are too many for that to be practical, is there someone who has solved a similar problem? Also a way to control them popping up all over. There are quite a few wombats on the land, so please — no poison solutions.

H. Hofmann
PO Box 85
CONCORD 2137.

Feedback Link-Up Feedback

Dear Grass Roots People,

Hi! We have been reading GR for quite some time now and enjoy every issue. It is great to know there are so many like minded people.

We (Lynne 44 and Jenny 12) live on the SOUTH COAST of NSW in a small mining community about 10 km north of Wollongong. It's a pretty area being nestled between the Illawarra Range and the Pacific Ocean. We grow our own veges and have a few fruit trees (fig, Babaco and a very young mango). Our companions are five assorted cats, one sweet faithful old labrador, a resident blue tongue and a maggie who comes almost daily to be fed. At present our house is on the market and we hope to make the move to mid northern NSW in the near future. Naturally our dream is an old house on a few fertile acres so that we can have our fresh veges, chooks and goat and live at peace with nature.

Does anyone have any ideas on using the fruits BABACO and PEPINO? I use them in fruit salad and curries and have tried drying them but they turn mouldy!

To John and Audeen Young (GR 59), re ASIAN PAW PAW, in Indonesia it is called Papaya Panjaney which means long Paw Paw. I have never heard of it by any other name. Does anyone know where I could obtain the seeds as I would love to grow them they are so much more flavoursome than the variety grown here.

To Graham Evans (GR 59), keep the chin up Graham, there are a lot of us who know what you are going through only too well! Things do get better in time. There's a whole new world out there just waiting for you.

Lynne and Jenny Thompson
710 Main Rd
COLEDALE 2513.

Dear Grass Roots Readers,

I am particularly interested in learning the art of BUILDING A HOUSE out of either mud bricks or river stones. If anyone is planning to build in the near future, I am willing to offer a strong back, eager hands and a friendly personality as assistance to you in doing so. I am 33, and will soon have enough money saved to 'retire gracefully' from city life, and buy my own piece of earth in the country.

I would also love to hear from any Grass Rooters who would just LIKE TO WRITE AND TALK. I'm vegetarian, and am interested in organic gardening, herbal medicine, reading, short story writing, bush walking, tai-chi, horse riding and anything which appears in this magazine. I'm a non smoker, a social drinker, and will write to anyone of any age, male or female. Hope the world has been a happy place for you all today!

Allan Hillier
PO Box 188
DAW PARK 5041.

Dear People,

Is there anybody not into smoking, drinking or anything else that puts you on the downhill skids, who would LIKE A GO AT COUNTRY LIFE for a while, or longer. Anybody who wants to live rent free and save money in exchange for some work, on a quiet fertile bush property at Nymboida, near Grafton, and grow their own veges and maybe build some accommodation out of local timber or river stones. You don't have to be a meditator, the main requirement being an open, honest healthy attitude to life.

I have frontage to the renowned Nymboida river and it's a delight to swim and canoe in most of the year. The property is 40 minutes to Grafton and closer to schools and town, and is being set up with a mixed temperate/sub tropical orchard.

Danny Callaghan
RMB 19 Old Coast Rd
COFFS HARBOUR 2450.
Ph: 066-494-257.

Dear Meg and GR Readers,

As a new *Grass Roots* reader I would like to say I find your magazine most interesting and very informative. I have noticed that there seems to be so few letters from Tasmania. It has been my dream for some time now to live an alternative lifestyle and to BUILD A SMALL STONE COTTAGE. I am a 44 year old female interested in corresponding with a male who likes the country, animals, gardening, stone building, leaded stained glass, music, art and crafts. If any Tas. GR readers would like to write, I would be only too pleased to answer.

Doreen Armstrong
C/- Post Office
WESTBURY 7303.

Hello Everyone,

We (Steven and Kristal), have recently purchased our own paradise. Thank you Meg and David for an excellent magazine, especially to the grassifieds section for helping make our dream come true. We decided we had had enough of the big smoke, and we headed for the mountains. We are slowly getting things in order, our tank is up and the guttering, but as usual it hasn't rained yet. By the way we are looking for a GAS FRIDGE (approx 6 ft) reasonable price and good working order. Does anyone know of a natural cure for DERMATITIS, it is on the upper part of my body, any ideas or helpful hints would be appreciated. The story by Carmel Muddle sounds exactly like us. When we read the story, it was as if somebody had been writing about us. If anyone has any tin sheeting for sale, don't be shy to get in touch. Also I'm after a washboard if anyone has one please write. Thank you very much for a real down to earth magazine.

Steve and Kristal
C/- Post Office
TABULAM 2470.

Dear Meg,

To everyone who took the time to answer my letter regarding my SINUS problem, THANKYOU very much. I received so many letters and have been able to pass on the information to others who wrote to me. I tried hard to answer all letters but it all happened at the time our daughter was born and I might have missed one or two — sorry. I appreciate the trouble so many of you took to write, it restores my faith in human nature.

Kay McBray
PO Box 1406
GLADSTONE 4680.

Dear GR Readers,

We are interested in making contact with anyone interested and trying to develop MASANOBU FUKUOKA'S natural farming ideas of *The One-Straw Revolution* by Rodale Press, Fukuoka believes we should work as close as possible with nature as nature has already developed the best method of growing plants but man in his vanity believes he knows better (artificial fertilisers, sprays, ploughing the soil etc.) and that his technology creates more complex problems, rather than solve them the more he interferes.

We seem to have solved most insect problems just by using natural manures and straw mulch and in three and a half years here we have improved soils and vegetables. Our main problem has been possums, as possums too seem to appreciate natural organic food. Our geese even know better and where grass has been improved organically they eat it to the ground while leaving unimproved areas to grow rank. We recommend his book and hope to hear from others using his methods or similar ideas. Thanks for a great magazine. Regards to all.

Norm, Kikuko, Francisca, Monique and Teresa Springall
PO Box 433
KEMPSEY 2440.

Dear Readers,

I would like to grow some COMFREY, and would like some seeds or an idea how to obtain it here in F.N. Qld. Also the type of soil and position in the garden.

I grow the fleshy spotted leaf Aloe Vera and wonder if this is as good as the one grown for sale. I have always used my own leaves on bad cuts and find it marvellous for bruising. I just split the leaf and tape over the affected area.

Dale
PO Box 123
COOKTOWN 4871.

Dear Grass Roots,

We are in our 40's and have longed to get away from it all and with six children it was only a dream. Now at long last with only a 5 and 3 year old left to look after we are going for the big step. Hope to buy 47 acres of virgin bushland outside Gladstone Queensland if finance comes through. We were wondering if anyone could help us with plans or ideas for an OCTAGONAL HOUSE of mud brick or other materials also plans for a MUD BRICK PRESS. Also if anyone could please help as our five year old son B.J. has EPILEPSY, are there any herbal treatments?

B and J Thomsen
3 Javelin St
STH GLADSTONE 4680.

Feedback Link-Up Feedback

Dear GR People,

I am writing to say thank you to Sheryl Gay for having the gumption to PUT THINGS RIGHT from the land agents and developers' point of view. I work for a very small land development firm and I can assure you that most developers are not 'ripping the public off'. It costs us around \$10,000 to develop five to nine acre allotments. These costs are made up from surveyors' costs, council costs, easement costs, roadworks and electricity charges and of course the original cost of acquiring the land. When you consider that the highest priced property that we have is \$12,950 and that it is quality land only two hours from Brisbane it will be seen that we are not 'ripping anyone off'. If anyone disputes these facts I will be only too happy to pass on the names of previous clients who are now friends enjoying their GR lifestyles.

Before signing off I would like to say thank you for a great magazine.

Ian Gleeson
PO Box 2
NANANGO 4315.

Dear Grassroots Folk,

We are very eager to start a BACKYARD WORM FARM. We have been to the Brisbane Library and read their three books on worms from their Junior Section, and have haunted the six or so city bookshops, to no avail. If anybody has any information they can share with us, we would be most grateful. We know heaps about worm biology, but are lacking in information on how to actually farm them.

Terry, Shelley and Pete
74 Albury St
DEAGON 4017.

Dear GR Readers,

Thank you, everyone for a fantastic magazine! It's a great feeling to know we all have so many friends out there in fellow Grass Rooters. I have just made the first really big decision in controlling my own life, though it may sound small-world to some, I'm on the way. I have just withdrawn from Uni after completing one year of Vet. Science. I felt pressured into it by parents, teachers and my own ignorance in knowing no other way of life, other than school. Though that decision has made some people very close to me unhappy. I am extremely happy with what I have done — I don't have to continue with a course I didn't believe in, and now I feel I really am in charge of my own life. So this year I'm working at a supermarket in the city, hating it and the traffic fumes, the noise, the wasteful way this place lives daily. I'm originally from a farming community even though that too was fairly mechanised and we used chemical sprays etc; it still beats the city, and I miss the outdoors so much. However, I'm committed to at least one year more, because I'm doing Art and Drawing courses at Tech, which I love, and in which direction I wish I'd had the fortitude to follow up from the start, even in the face of discouragement. After this year — who knows? I'd perhaps like to do a Fine Arts course or might find myself travelling the opposite ends of the earth! I have a square of earth which at the moment is rather parched and sandy but I hope to have a wonderful organic garden there soon. I have just started a compost heap. A really great book to get anyone even remotely interested, enthusiastic about organic gardening is *Gardening for Health and Nutrition* by John and Helen Philbrick. And if you want to take L. Marold's concept with the Farran (GR 59) further, then a fantastic little book which I found hiding in a public library is *Making Simple Clothes — The Structure and Development of Clothes from other Cultures* by Ida Hamre and Hanne Meedom.

Lastly, if anyone would care to DROP ME A LINE, I'd love to hear from you. I'm feeling rather lonely, and would love the company of fellow Grass Rooters! I believe we all have so much to offer in the way of friendship and love and encouragement. I'm 19, so I'd love to hear from younger GR's, guys and girls; but anyone please feel free to write. Are there any other Grass Rooters in Perth who'd like to get in contact? I don't smoke, drink, not into drugs; I love the outdoors especially the sea, and of course, drawing and being creative. Please write.

Julie Pech
5/6 Mt Henry Rd
COMO 6152.

Dear Readers,

Does anyone have any good recipes for GOATS' MILK SHAMPOO and conditioner, or any herbal recipes for DANDRUFF as I can't seem to get rid of it.

Julie Faithfull
RMB 1635
NARRACAN 3824.

Dear Readers,

For years we have searched for a place to live where we could be ourselves, not one of the mob. So often in city life the neighbours frown at the sight of a compost bin or look the other way if you bake bread. Well we have found 'it' at last. Not on the coast where prices are high, but we have good inland fishing all the same. Our climate is good, this year we produced all our own vegetables and have a lovely outlook over the river. We have six acres in the town area which also gives us town water supply which is free from additives. Does this sound too good to be true — we thought so, but last year we built our own home by 'Owner Builder Permit' so it's for real! Our local shire is fairly acceptable to modern ideas which makes life here very tolerable. We have a school from kindy to year 10 in town, all types of shopping, hospital, doctors, S.R.A. bus to Tamworth daily and Inverell only a short distance away. Copeton Dam is a beautiful place to visit but with the attractions around us here it seems a waste to look any further. Land here is cheaper than any other we found with this quality, rates are the cheapest we found both Rural and Town. Population under 2000.

Why not have a look around here when you are looking for 'that piece of Australia' which has your name on it? Areas such as this have great potential for down to earth people like us as there is still that element of 'Pioneering Spirit' here. A market day is a regular event, not an intrusion. Would like to hear from you, all letters will be answered.

Ros and Bob Jones
Brigalow St
BINGARA 2404.

Dear Grass Roots Readers,

I am writing to see if anyone can help me, with information on how to make my own SHAMPOO, face moisturiser for dry skin and HOUSEHOLD CLEANING PRODUCTS, out of cheap easy to obtain products. Also does anybody have a recipe to PICKLE HOT CHILLIES and OLIVES. We are a family of four just moved from the city, on a limited budget, trying to get our small hobby farm started. I would really appreciate any advice.

Rosemary Ernst
PO Box 32
WALWA 3709.

Dear GR Readers,

I am about to retire and I am building a house on a quarter acre block in a small country town, have water laid on.

The average rainfall is 72 to 82 in a year. The soil is red volcanic loam, the further down you dig the redder it gets and lots of worms. It is that type of soil if you put in a walking stick it would grow up a gumtree. I was given a compost heap. It was eight foot high and two foot across and has been built on for the last twenty years. It has sand, grassclippings, cow manure, fowl manure, lime, sulphur and a few other things (and turnip weeds). I have made a garden 40 ft x 12 ft x 6 in deep, dug it out, put six layers of newspaper on the bottom, covered the paper with cow manure and put the loam on top of that. Then compost, raked it in, put the hose on it for two days, then planted vegetable seeds of all kinds in rows one foot apart.

Now it is five weeks later it looks as if I am going to have a vegetable salad jungle. But I have a problem, I don't know the first thing about GARDENING. Should I write to Dorothy Dix, buy a book or find a nice lady to look after me in a manner I am not accustomed to?

Jack Bax
42 Gallipoli St
LIDCOMBE 2141.

Dear Meg and David,

I need your help! Following my ad in GR 58, 'French male . . . looking for a female companion'. I received numerous letters and all of them have been answered.

I thought I had found the woman of my dreams, but she gave me only a name 'Madeline' and a PO Box in Maroochydore (Qld.). I've written five letters to her and even sent a cash cheque, to no avail, no answers, the cheque is still there, uncashed!

If you 'MADELINE' are reading this, please call me as you're representing the woman I want so much to meet! I'll be waiting near my letter box days and nights.

Claude 'Casablanca'
Old Grafton Road
GLEN INNES 2370.

Feedback Link-Up Feedback

Hi there,

I've been reading this magazine for so many years that I've lost count. This is the first time that I've gotten myself to write in. We (Gordon, Kari, 3 years, myself and Kep the red cattle dog) are at the moment caretaking an island 20 miles off the central Qld coast. It's certainly a rewarding experience as we are all greatly benefiting from the peace and quiet (generator runs split shift for 5 hours a day), the freedom of doing your own thing, the using of ones own initiative and the growing unity of all our relationships is truly wonderful.

Our future plan is to buy a 40 ft CATAMARAN and take out charters around the Whitsundays. Sounds great, sure does to us! Now for my questions. If anyone knows of any land and/or communities around that area please write. Also anyone who is or has LIVED ON BOARD a boat with young child and/or dog with any helpful hints, would love to hear from you.

At the end of 87' we will be travelling south to the central coast of NSW. If there are any owner-builders who would like a hand, we'd be only too pleased to help out. We will be self-sufficient accommodation wise, but will be in the need of some friendly chatter. Gordon is particularly interested in mud-brick. Myself, I just think building your own home must be the greatest.

I know this has been talked about repeatedly, but any repellants for sandflies? They eat us alive and every minute we have to be covered from head to toe in something like 'Rid'. How good can that be for ones body? Also what's the secret to being able to avoid giving a dog a heart-worm tablet every day? Any proven remedies around?

**Lorrie Powell
PO Box 1059
MACKAY 4740.**

Dear Grass Roots Readers,

For four years I've read the hopes and dreams of many of you. Everyone sounds so friendly and helpful and it's so easy to have a mental picture of all your escapades and experiences as I read through the columns. I've decided to have a try of getting onto a small acreage myself, and five offspring. However, I only have limited capital \$10,000 at the most. Has anyone made a start with that amount or less? I'd love to own my own piece of dirt and not be in too much debt. I'd settle for a long term lease on an old house on acreage, but I'm afraid I'd become attached to it and then have to leave. I'm 43 years old and not afraid of hard work, my children are aged 15, 8, 6, 5 and 3 years. For this reason I need to be reasonably close to schools. I'd be very pleased to hear of your experiences if you had similar capital as me and have made a successful start to a DIFFERENT LIFESTYLE. I would need information on even the basics such as raising chickens. I'd like to make my own soap and grow as many vegies as possible, even have a house cow. I'd really love to ride a horse and my eldest daughter would be ecstatic at the thought of owning one of her own. That's a rather elusive dream of hers.

Well folks, I'll just sit back and keep reading and waiting anxiously for any replies.

**Marj
PO Box 202
MARYBOROUGH 4650.**

Dear GR Readers,

After drifting in a drowsy chaos to the grave in Sydney for some years, I knew I had to leave. As man must have the courage to lose sight of the shores to discover new oceans, if you are not happy with your present station in life, you must effect a change for the better. I've been in Brisbane now for just over a year.

I'm a gemini, 28 years old, strong and healthy with a sense of humour. Also I'm actively interested in NUDISM. Are there any weekend clubs or weeknight swim nights in or around Brisbane, that accept single males? Also does anyone know where the permaculture community 'Crystal Waters' is located?

**Hep
C/- Alderly Post Office
BRISBANE 4001.**

Dear GR,

Here is information about our town ASHFORD. I have received numerous phone calls from people who have never heard of this town. I contacted the local council who would be only too happy to give anyone any further help on any enquiries by contacting Inverell Tourist Division. Phone number 067-22-16-93.

**Mervyn Scholes
5 Frome St
ASHFORD 5035.**

Dear Grass Roots People,

Can anyone out there please tell me where to get info on DOME BUILDING, either with prefab joiners or the detail necessary for making our own. We want to build some pipe frame shade houses (termite infested block and won't use poisons). Thanks heaps.

**Gai Early
PO Box 2062
MOUNT ISA 4825.**

Dear Friends,

Finally have time to write to you all. We're sure all of you who are trying to build, care for children and animals, work the garden, make jams, bottle fruit, make sauces etc., will understand how little time is left for letters. Life is hectic as usual here. Gearing up for the arrival of lots of baby goats, then, a calf in September and three donkeys in January.

Still fighting the Weed Control Board. They're now demanding 'Scientific evidence' that HERBICIDES have damaged our immune systems, so it's back to Melbourne for more tests. Crazy, isn't it? The specialist said, 'Avoid things', yet I have to go to a city for tests.

Word is around the island that we'll take in stray, unwanted animals. We've been given three female donkeys, a beautiful, quiet ten year old mare, and numerous goats. It's a great way to build up your stock. Have started to build the house in rammed earth. Decided not to build in stone so we can avoid the cement. If anyone wants to look at land, or just wants to see this magic island, you can camp on our land. But I must request no smoking or perfumes etc, because of our allergies. Hope to see some of you soon.

**Howard, Marilyn, Casey and Sashlene
Box 37
American River
KANGAROO ISLAND 5221.**

Dear Grass Roots Folk,

I am a 23 year old writing to *Grass Roots* for the first time. It's really good to find a magazine with such down to earth information and friendly advice. I am trying to find an OLD FRIEND of mine, Les Bowden. If anybody knows of this hard to find bloke I would be pleased to hear from you. Also if anyone would like to drop in for a cuppa, feel free to write.

**Allan Talbot
PO Box 192
BOMBALA 2632.**

Dear Readers,

I've been an avid reader of *Grass Roots* for quite a few years, and I hope at Christmas time to make a move to Cooyal, 30 kms from Mudgee, where I own half of 25 acres. I want to put a Settlers Cottage kit home on the block and add on in the future in mud brick, as the clay there is a lovely creamy colour and seems ideal, as I made about 10 test bricks a few months ago and they are going really well out in all weathers! I am into weaving, spinning, pottery, painting and poetry. I hope to one day have a flower garden, vegies and chooks. At present there is a two room shed, quite comfortable, with a kero fridge, fuel stove, primus and other things, so if any readers would care to drop in on their travels and lend me a hand I will be most grateful for the company, as well, in return, I'm a very good cook. Couples with kids are most welcome as I have a daughter Jassy Leah aged 9 and a son Nijal Stephen aged 7.

**Leah Patricia and family
C/- St Peters Post Office
ST PETERS 2044.**

Dear Grass Roots,

Both my husband and I are presently in Darwin with one of 'the services'. We are planning to move down to Melbourne soon and pick an appropriate place to build our own mud brick home and live a happy healthy life bringing up our two children. The trouble is neither of us are familiar with Victoria or its countryside. We would LIKE to be within a 1 or 2 hour drive from MELBOURNE but definitely country or a RURAL AREA suitable for a mud brick house and small hobbyfarm. Are there any Grass Roots people out there who could suggest our possible future homesite. Any information welcome on places, mud brick homes or even hobbyfarms. We are definitely 'rank amateur Grass Rooters' but we are very very willing to learn.

**Kerrie White
5 Wilmells St
HMAS Coonawarra
DARWIN 5791.**

Feedback Link-Up Feedback

Dear Readers,

We bought our 5 acres last year near Gympie. We were planning to save for a couple of years before moving onto it but fate stepped in when Alan's firm closed down and because of his age (late 40's) there is little chance of further work in this area so we have decided to move in the next few months. However this means we will not have a great deal of money and wondered if readers know of any cheap forms of housing. We were thinking of a 'kit' home, the land is on a development site and I don't think they will approve a rough log home though we have plenty of timber. I know many put a shed up first to live in while they build but these are quite expensive and would mean less money to put towards the house.

We would be pleased to hear any SUGGESTIONS FOR BUILDING and getting started. We have been in Australia only 5 years and have loved every minute, only wish we tried to make the move from suburbia earlier. Also does anyone know of a way to seal a coalwash path to stop it being walked into the house on shoes.

Mary and Alan Law
9 Newton Cres
OAK FLATS 2529.

Dear GR Readers and 'Makers',

I'll try to keep this brief. I suspect my son has a reaction due to DIELDRIN USAGE and wonder if anyone can enlighten or assist me. The poison is sprayed onto grass and fruit trees where we have been living since March. My son, then 9 months old, developed a rash with little water blisters which I thought was prickly heat infected. Treating it with tea tree oil clears it but never rids it completely. Three months later he still has it. I'm breastfeeding so he is perhaps receiving 'doses' through the milk as well as environment. Is there any testing that can be performed by someone to clarify whether Dieldrin is the cause? Removing ourselves from the possible cause would be my best test but at the moment is impossible. Is anybody following Anne Wigmore's raw food living, especially with a baby? Please write, I need help and perhaps can give some.



Heather Cleary
MS 509
SARINA 4737.

Dear Meg, Readers and Grass Roots,

I am desperate to learn how to go about making milk, butter, cheese and so on, from SOY BEANS. My experiments haven't been too successful so far. I've got several recipes but something goes wrong somewhere with poor results. Would there be someone, in-or in the proximity of Adelaide, who is willing to show me how to do it properly?

My youngest daughter and myself have been diagnosed as food allergy sufferers and also for a whole range of chemicals which can be found in just about everything. It makes life a bit easier since we know what caused so many problems and we're adjusting quite well, learning by trial and error what to omit and avoid. Whether we have to move to an area with clean fresh air is not on as yet but may be necessary eventually. All information on clean areas, or on areas known for abundant chemical sprayings, are appreciated. Does anyone know of a treatment against white ants without the dreaded chemicals? Lots of questions to be answered but I hope you can help me out. Lots of love.

Hannelie Lodenstein
8 Wilton Ave
CAMPBELLTOWN 5074.

Dear Grass Roots,

Eva and Martin Finzel: a bloke I know uses the MAGNA WAVE BOOSTER on his radio, and it does work. Jacqueline Benjamin: SILKWORMS I kept as a kid thrived on black mulberry (*morus nigra*) leaves. Selby Gouldstone, in his *Guide to Food Bearing Plants*, states that the white mulberry (*morus alba*) is 'cultivated in China to provide leaves to feed silk worms'.

Mrs. Dundley mentions a 'sticking-plaster' cure for SKIN CANCERS. I can't testify on this, but have proved that elastoplast will remove warts. Cover the wart and leave it for 3 or 4 weeks.

The CAT DEBATE: though we have one well-used old moggy, we won't be replacing him. The bush can do without 'em. If you 'must' have cats in the bush, spey your females by all means, but fix old Tom as well. Your pets are your responsibility! If they are feeding on native fauna, use whatever means to stop them.

Gerard Mahoney
Gorge Rd
NOWA NOWA 3887.

Dear Grass Roots Readers,

We are writing hoping that someone may be able to help us. We have 60 acres of land at Strathbogie and plan on moving onto it within the next 2 years. Our plan is to grow organic produce. We have approx 40 acres of cleared land and 20 acres of beautiful bush and large rocks — which will stay as it is.

We have a problem with THISTLES and BRACKEN — thousands of them. To date we have been systematically chopping them down as we don't want to use herbicides etc, however it is time consuming. Does anyone have any handy hints for getting rid of thistles and bracken? We would love to find an easier way. We have lots of work to do — planting trees for windbreaks, fruit trees, vines etc. and erect a dwelling and shed. So our holidays and weekends will be busy, we enjoy going bush and are reluctant to return to the city. Hope to hear from anyone interested.

Jo and Terry Campbell
9/446 Albion St
WEST BRUNSWICK 3055.

Dear Folks,

My husband and self have recently moved into a cottage in the agricultural district of mid-northern NSW. We seek advice, ideas and information to help us with a few minor problems that we have.

Does anyone know how to permanently get rid of mice and rats? We don't want to use poisons as we have children and animals about the place. Also has anyone a blue-print for a person-powered washing machine? And what can we use to effectively clean our clothes other than commercial brands of washing powder, preferably something cheaper! Does anyone have the recipes and instructions for making soap, candles and tahini? Could someone please recommend a health food store within a 50 km radius of Moree.

And last, is there anyone in this area who would like to correspond and/or exchange visits? Especially those with young children. We will answer all letters and refund any postage costs necessary.

Helen and Dave Letham
C/- PALLAMALLAWA PO 2399.

Dear Grass Rooters,

I've just been reading the letters in GR 60, and there seems to be such a lot of agonising about Christ's diet. Do you all want to be so much like him? I bet you're not all celibate (wasn't he?) I'm sure none of you want to die by crucifixion.

For goodness sake, if vegetarianism or veganism is right for you because it makes you feel healthy or because your concern for other beings on this planet leads you in that direction, then do it. Don't do it because you think somebody else might have. I'm sorry for this outburst. I'm not a Christian, but for those of you who are, surely what Jesus taught should be somewhat more important to you than what he ate?

I wonder if anyone could help with some advice. We are about to move onto an acre, and want a lawnmower, 4-legged variety. I am a keen SPINNER, and I am just wondering which breed or crossbreed would have the most SUITABLE wool? I would like a coloured sheep. I hope someone can advise me. Follow your star.

Amanda le Bas
Currajong Ave
SELBY 3159.

Dear Meg,

First of all I must tell you that I enjoy very much reading GR mags particularly the subjects on gardening and believe it or not but also recipes, especially those that our grandmothers used which regrettably have mostly gone out of fashion since the invention of the can opener.

Living in harmony, and as close as possible with creation is to me the only way to live and those who have achieved this are very fortunate considering the way that the society we live in today is going. It is very evident from some of the letters written to GR that no matter where people live they are not immune from vandals and thieves, but then this is a sign of the times that we are experiencing today.

One of the things I would like to talk about is GARLIC which as many of your correspondents say is nature's medicine for many ills. However eating it is one thing but growing it is another and one which I have great difficulty in accomplishing so could one of your readers please tell me how it is grown, the depth it is planted and when it is best harvested. Everything I have read only says that garlic is a herb but never tells you how it should be cultivated.

W. A. Morrow
Orient St
NULKABA 2325.

Feedback Link-Up Feedback

Dear GR Readers,

I have just made the first really big decision in controlling my own life. I have just withdrawn from University after completing one year of Vet. Science. I felt pressured into it by parents, teachers and my own ignorance in knowing no other way of life other than school. Though that decision has made some people very close to me unhappy, I am extremely happy with what I have done — I don't have to continue with a course I didn't believe in, and now I feel I really am in charge of my own life. So this year I'm working at a supermarket in the city, hating it and the traffic fumes, the noise, the wasteful way this society lives daily. I'm originally from a farming community and I miss the outdoors so much. However, I'm committed to at least one year here, because I'm doing art and drawing courses at Tech, which I love.

I have a square of earth which at the moment is rather parched and sandy but I hope to have a wonderful organic garden there soon. I have just started a compost heap. A really great book to get anyone even remotely interested or enthusiastic about organic gardening is *Gardening for Health and Nutrition* by John and Helen Philbrick. And if you want to take L. Marolds concept with the Farran (GR 59) further, then a fantastic little book which I found hiding in a public library is *Making Simple Clothes — The Structure and Development of Clothes from other Cultures* by Ida Hamre and Hanne Meedom.

Lastly, would anyone care to DROP ME A LINE? I don't smoke, drink and am not into drugs. I'm feeling rather lonely and would love the company of fellow Grass Rooters!

Julie Pech
5/6 Mt Henry Road
COMO 6152.

Dear Grass Roots Friends,

Can anyone put me in CONTACT with an old friend, Peter William Jones. He was living near Wiseman's Ferry NSW about 4 years ago. He originally came from the Kenthurst area NSW. His birthdate is 11th April so he would be 24 now. I would very much appreciate anyone's help, as this friend was very dear to me.

Lisa Stone
2 Forster Road
ECHO POINT KATOOMBA 2780.

Dear GR Readers,

This is the first time I have written in to GR. However I enjoy buying it when I can. I am hoping a few readers can spare the time to assist me. I am 49, and suddenly after working all my life, I am alone and facing a very uncertain future on the dole. I am not prepared to accept this indefinitely so I am making jams and relishes to sell at the local market! The article on *Steam Cooking* by Hylda Bracewell, GR 60, looks terrific and I am hoping to try out her recipes. Does anyone have any favourite RECIPES or tips for PRESERVES or such that are easy, economical and useful for MARKET STALLS? I would greatly appreciate them.

Vanda
1-24 Lancaster Street
GARBUTT 4814.

Dear Readers,

A year after putting our property on the market, we're still here, still hating the heat and still looking forward to our eventual move to Tasmania. Have any readers had any experience in building a PYRAMID house? We understand the principle of needing to conform to exact dimensions of the Great Pyramid, but would be very interested to hear from anyone who has built in that shape, or is planning to do so, or maybe can put us in contact with someone who has tried it? Our idea is to try the shape using MUDBRICK, but we're not sure how feasible that would be — my instincts tell me it would be OK for at least part of it, since it's been proven to be such a durable building material for more conventional shaped houses.

Would anyone having an interest in PERCHERON DRAUGHT HORSES, in Tasmania especially, be interested in writing to me? I fell in love with the gentle, grey giants many years ago and have a dream of owning and or breeding them in the future. I've had quite some experience with horses, but restricted to showing and breeding Paint horses. I'd also like to fulfil another dream of driving a horse in harness.

I love reading Feedback, especially the handy hints people pass on, but I've got to use a pen to mark the ones I need otherwise I can never find it when I need the information. Bad memory, must be old age creeping up?

Errol and Marianne Irvine
Hay Rd
WOLVI VIA GYMPIE 4570.

Dear Readers,

I have just been reading through the April edition of GR and noticing how many other people have received replies to health queries, ventured to hope that I may also be lucky.

Please, does anyone know of a sure-fire cure for THRUSH? Ordinary medical practise has so far been of no assistance, and is, as well, expensive. Myself (30) and Rebecca (22 months) and Nathaniel (10 months) seem to have it continuously, which is not much fun, especially since we now seem to be getting secondary infections as well. I shall reply to any letters — though not necessarily promptly!

Jenni Simpson
11 Vale Street
PORTLAND 2847.

Dear Doris,

Regarding your CAT and its 'DERMATITIS' caused by fleas GR 56. Maybe, just maybe, the cause isn't fleas at all. I'll tell you of my experience which just might help you. I had a black cat which started to itch around the tail area and was forever tearing out hunks of hair. I took him to the vet, who said it was a hormone problem and gave me pills, which he said the cat would have to stay on for life. The pills worked in that the itching and hair loss stopped but the cat grew fatter and fatter until we changed his name to 'Balloon'. As soon as we took him off the pills the problem came back. He died eventually, of what I'm not sure, but he was grossly obese and always hungry poor thing, so it was for the best.

Then my other cat developed the exact same symptoms. Itchy around the tail and hair loss. He was dropping hunks of hair everywhere and looking quite mangy. I was reluctant to resort to the pills again, and wondered whether it could be something lacking in the cat's diet. He had been eating the most expensive tinned fish (pilchards, tuna etc.) plus that dry cat's food. I changed his diet to fresh minced beef from the local Pet Shop. Not tinned, not frozen and called 'beef' although it may be horse or kangaroo, I wouldn't know. All symptoms disappeared within about two months and that is about nine months ago, and my cat is healthy and all solid muscle. The beef is no more expensive than the tinned food I was using.

Jo Kirkwood
PO Box 132
COORANBONG 2265.

Dear People,

We are a young family, Karen 30, Cliff 28, Joshua 3 and Lachlan 6 months. We have aspirations of moving away from our suburban existence to the rural scene. Our financial position does not lend itself to going it alone so we are looking at the idea of buying into a co-op/share self sufficient farming set up. It all seems a little scary however so we need people who have made the move — failed/succeeded to write to us TELLING US OF THEIR EXPERIENCES. What should we be wary of and lots more queries. We'd like addresses of co-ops in NSW and Victoria but only genuine ones.

In mid-late 1987 we intend travelling through Victoria and NSW to the Queensland border with the sole purpose of meeting GR people who've made the break so we can see at first hand and discuss all aspects of an alternative lifestyle. Hopefully we might be able to stay a short time and give a hand in exchange. 'Desperately Seeking'.

Karen and Cliff
14 Kangarilla Rd
MCLAREN VALE 5171.

Dear Grassroots Readers,

I am currently looking for land along the QUEENSLAND COAST, preferably rainforest, and preferably fairly isolated. What I would like to do once I have bought this is use it to establish an artistic community. I would like to hear from anyone who living in the area knows of land that might be suitable.

Stephen
3 Humble Street
EAST GEELONG 3219.

Dear Sandy, Jed, Sunshine, Denny and Kain,

We met you in Bowraville in 1986 and would love to know where you are and get in contact again. Love to all GR readers and thanks to Meg and David for providing this opportunity.

David and Sally Arnott
18 Malakoff Rd
BEECHWORTH 3747.

Feedback Link-Up Feedback

Dear GR Readers,

Perhaps some readers from South Australia can help us. I have recently returned to Australia after a number of years travelling (mostly cycling) overseas. My husband, Marco, is from Lamu, Kenya and has come to Australia for the first time. We are living in Adelaide at present as having a job is rather high on our priorities for now, but I am very keen for Marco to MEET GR TYPE PEOPLE, and finding them in the city is very difficult. I am also finding that after so many years of being transient, my friends are spread all over the world and I know very few people here. We badly need some good company, and would love to help out sometimes at weekends maybe, or just visit and meet some like minded people.

**Pamela and Marco Polo
Flat 1, 527 Lower North East Rd
CAMPBELLTOWN 5074.**

Dear Readers,

Up until reading 'Rearing an Orphan Lamb' in *Early Years* I had had no success. The farmers always suggested watering down cows milk which is a no-no! When you know, they probably starved to death, but happily since GR helped I have successfully REARED LOTS OF LAMBS. Our warmest spot is by the pot belly stove, with the cat and the lamb fighting for best position. Quite often I'm sure we could smell roast lamb (and we didn't have the oven on) if it got too close. But lambs aren't house trained, even if it's only inside a couple of weeks. I tried putting a nappie on it but its' tail got in the way. I know how Jake the peg felt with his 3 legs. Then one of my boys came up with the suggestion of putting an empty soup tin under it when it squatted, it worked but most lambs (mainly ewes) were so tiny it was difficult getting a soup tin under but a shorter salmon or tuna tin, well now your talking! You soon get to know when they want to go, eg. after a feed or when it wakes up from a sleep. Now the floor is dry and they even seem to smile, squatting over their tin and so do weeeeeee!

Joan Gardner and the gang at Yinnar South.

Dear Readers,

I would like to hear from anyone who has a RECIPE for HAIR SHAMPOO, conditioner or tonic. I have long auburn hair which is dry and brittle and trying to solve that problem using different commercial products is costly. Any recipes on bath oils etc., would be great also. I would appreciate any replies.



**Cheryl Credlin
309 Lal Lal St
CANADIAN 3350.**

Dear Grass Roots,

In the interest of feedback perhaps I should relate the other end of the great rural story — A RELUCTANT RETREAT TO THE CITY. Nine years ago my family made the break and moved to a bush paradise in a (then) little known part of Kangaroo Valley. We were both 35, and our children were 3, 7 and 9 years old. It was an exciting change of style and pace. Bad roads and a regularly flooding creek made life a 4WD adventure while we re-built an old house, established a semi self-sufficient farm and set up a pottery. Familiar? We developed a tight community of like minded neighbours and organised a social and cultural life to fill that vacuum. Life was physically hard but very very rewarding.

But . . . yes, nothing is static except poverty. I was sometimes unemployed, sometimes under-employed but never able to make ends meet comfortably enough to really finish a project before the next became urgent. As the older children grew to teenagers their social interactions became more important to them and the land with its associations moved to the back burner. Country kids have dope and trail bikes but not much else. Furthermore, I am professionally trained and eventually felt the need for intellectual goals. Our marriage failed and both family and land are divided.

So, here is a single parent in the inner city with two almost independant children, escaping to the farm on weekends to visit younger daughter, regain sanity, fix fences and attend to the cattle. Of course it was worth it, for all of us. It was a unique experience to live naturally and learn a new trade. Again, nothing is static and somehow I will return, hopefully without the same poverty.

**Antony Harvey
32 Red Lion St
ROZELLE 2039.**

Dear GR Readers,

Firstly I'd like to congratulate Meg and David for an informative, helpful and enjoyable magazine. Providing a means by which country and city folk are able to assist each other. It is to this end I am writing. I am a chap in his early fourties who is IN NEED OF DIRECTION. For three years I rented a house in this area for the sole purpose of discovering if I could cope with being alone. As luck would have it I loved it!

After 3 years of self examination and learning about the environment of this picturesque area I purchased a nearby property. Believing I knew the general climate. Now I had 235 acres of which 60 is cleared — approximately 2/3 reasonable soils — with a small but permanent creek. Five years of reading GR Bio-dynamic books, organic books and being on a farm for a few months has not prepared me for the life I have chosen. I am like a fish out of water!! I have come to accept the loneliness however, the lack of practised knowledge for working the land these last 12 months has dampened my enthusiasm to the point where I have considered returning to suburbia where a PAYING job awaits.

There must be many readers who were confronted with similar frustrations initially yet were able to reverse the situation. I'd be very pleased to hear from anyone prepared to share their secret at starting from scratch while remaining financially viable. I have considered growing vegetables but without a green thumb have discounted them. Insufficient area for cattle, too wet for goats and sheep. Presently looking into herbs. I am interested in growing marran, despite acid soil. Anyone growing commercially? Also Sharlea ultrafine wool production. The public relations organisation for the latter accepted my \$10, forwarded their booklet but beyond that they are unnamed. I need a name and address of a producer to answer questions the booklet doesn't.

Does someone in N QLD have a Yoemans rigid type plough, otherwise known as a BUNYIP SLIPPER IMP which they no longer need and be interested in selling. Need a 7 or 9 type with WOMBAT and BATSWING slippers.

Love to hear from anyone who'd like to drop-a-line to a man of few words and possibly Mr Average in build and appearance.

**Ross Shute
PO Box 251
RAVENSHOE 4872.**

Hello GR People,

My first letter to GR though I've been an avid reader since GR 36! First of all, I'm a single mum — 4 children 11, 9, 7, 2. I would be grateful to hear from anybody who is on the 'SELF BUILD' PROGRAM with the VICTORIAN HOUSING COMMISSION. Hopefully soon I will be building our long awaited home. If there are any people on this program who would write of the pros and cons of building within the confinements of the commissions' contract, I would love to hear from you or even lend you a hand! I'm in Kyneton on approx 2 acres in an old house, slowly getting this place organised, but unfortunately I live very close to the abattoirs — reason for cheap rent. Are there any single GR mums and dads in Kyneton? The place isn't that bad! After all, I'm here! Write soon.

**Ossie Parker
C/- Post office
KYNETON 3444.**

Dear Grass Roots Folk,

We will be TRAVELLING NORTH next month or so, hoping to find a place that would suit our family. The 4 of us will be travelling in a campervan probably as far as Cairns, so if you like folk music, need a hand with building or chores or would just like come socialising and don't mind 2 boisterous little boys, drop us a line and we'll call in on our way through!

**Mark, Kerrie, Robbie & David
2 Lakeview Rd
MORISSET PARK 2264
Ph: 049-731-977.**

Dear GR Readers,

I am 16 years old. After high school I will be striving to obtain my own piece of land but hopefully will do it with a group, up to twenty people in all to start with. My problem is that I don't know HOW MUCH LAND, CROPS AND STOCK that I should be considering obtaining. I'm hoping that someone could please write to tell me. Thanks for a fantastic magazine.

**D.S.A. Herbert
69 Gardenvale Rd
GARDENVALE 3185.**

Feedback Link-Up Feedback

Dear GR,

We are writing to invite ANY VEGETARIAN/SINGLE TRAVELLERS to spend a few nights in our household. We have a friendly family atmosphere and love meeting like minded people who respect the Earth. People of pleasant and temperant habits are welcome. We have a large house on the edge of suburbia in the Adelaide Hills over looking grazing land, creek and dam. Musicians and activists especially welcome. Half an hour into city centre by train/bus. See you up in the 'Hills'.

**The Anti Nuclear Family
9 The knoll Cres
COROMANDEL VALLEY.**

Dear GR Readers,

My husband, daughter and I are planning to move south as soon as we can find a suitable place, preferably somewhere around Horsham, Bendigo or Ballarat districts.

Meanwhile I'm trying to compile a library of information and books on relevant ideas. We'd like some help and advice on the following ideas: legalities of teaching children at home; alternatives to commercial soaps, cleaning agents, nappy rash creams, and toiletries; cooking without sugar and salt, jams, sauces or cakes; the breeding and availability of Angora rabbits; use of effluent and waste water for gardens; how to make soy bean products; and lastly, a place where you can buy terry towelling pillow cases and fitted queen size sheets.

We've just recently been introduced to GR and find it extremely interesting and informative. We'd appreciate any replies and all will be answered.

**Gayle, Bert and Andrea Tuddenham
PO Box 3967
ALICE SPRINGS 5750.**

Dear Everybody,

Could somebody tell me how to get in touch with the PRITIKIN ASSOCIATION? I believe Rollo de Castella was in Albury to start their Association. I am in Sydney at the moment, and would be really grateful to have contact with someone from this Association.

The other thing is this — I yearn so much to move to the north coast of NSW, but like so many other people, I don't have enough money yet to buy anything. However, I am starting a course on Farm Technology and Animal Husbandry so that when I do move north I won't get washed out, so to speak, the minute something goes wrong. Is there a kind soul who could give me advice on HOW TO GET STARTED? I read all these wonderful articles in GR, it inspires me to get going.

Also, I think it would be pretty stupid not to have a job to go to, so if someone has any thoughts or ideas for me on how to land a job I would be very grateful.

**Fae Fitzsimmons
166 Sutherland St
PADDINGTON 2021.**

Dear Grass Roots,

I have a few enquiries that perhaps you could help me with. I am interested in purchasing a FOLEY FOOD MILL, a steel one operated by a hand crank that produces a puree. Could you advise me where I can obtain this device or something similar.

Also I have some enquiries about JAPANESE VEGETABLES and certain grains. Does anyone know where I can get seeds of burdock (root vegetable), black beans (black soybeans), Jinenjo (mountain potato), Kuzu, Hokkaido pumpkin, lotus, sweet rice (glutenous rice for making mochi), wheat berries (red in colour I believe), glutenous millet, arrowroot and romaine lettuce. I would be appreciative of any information you can forward to me.

**Melissa Burke
52 Murrarji St
HAWKEN 2614.**

Dear Grass Roots,

We need any information on how to make and keep GRAPE JUICE.

**Betty Hawkins
'Kallara'
TAMBAR SPRINGS 2381.**

Dear GR Readers,

Thoroughly enjoying your magazine. HELP FOR ANIMAL LOVER WA GR 60. Windmill Herb Farm 384-394 Ryans Road, Diamond Creek, Vic., Phone: 438-34-08 supplies any herbal or homeopathic preparations for animals. Hoping this will help readers.

Animal lover.

Hello,

I have been a GR person for years now, but have never used this magazine for contact before. Now that I need it, I think it is a wonderful system for getting people in touch.

I am a 30 year old mother of 3 and have been living in the mountains behind Mullumbimby for 7 years. We have paid off a small piece of land on a creek frontage, built a small cabin, (no electricity) planted some fruit trees, gardens, grown lots of pumpkins, and have horses to ride. We have done all this while on social security payments. It wasn't easy because we had to go without lots of things and live a very basic lifestyle.

Now, with the land paid for, and too many children to live, even basically, in a tiny house, and funds needed to get a bigger house and more land together for the kind of self-sufficient lifestyle we would ultimately like, we have found ourselves back in Brisbane for a while. Back in the rat-race to pursue a career (as an illustrator) so that when I do get back to the country I can support my family from home.

I am an artist, I love horses and animals, mostly vegetarian (not strictly) I smoke and drink occasionally, but am also a very spiritual person who feels very alone in a place like Brisbane without knowing anyone to relate to. I have just written and illustrated a children's picture book called *A Magical Planet* about the cycles of life, as an attempt to educate children to be aware of nature and their relationship with it. (I've had a lot of response from people in the Mullumbimby area even though it hasn't been published yet.)

What I am looking for is PEOPLE IN THE BRISBANE AREA to communicate with, while I am here. I have two boys aged 2 and 5 and have a 10 year old daughter who would also like some friends.

Hoping to hear from anyone as soon as possible, or call and visit for a cuppa.

**Marilyn Fort
18 Chatsworth Rd
GREENSLOPES 4120
Ph: 07-397-1910.**

Dear Megg, David and Co.,

Things are progressing slowly but surely since I last wrote to you (GR 54). There have been many ups and down but everything has been put more or less on an even keel lately. The six GOATS we had originally grew to become over 20 at one stage, what with kiddings and buying others' 'rejects'. I sold a few wethers for meat (out of 7 kids we had 5 buck kids) and some of the does I sold once their kids were weaned and only kept the doe kids and 2 older does. Mustn't forget Freddie. One little polled wether who is so sweet and friendly, a real clown. We kept him for comedy relief. He does have beautiful cashmere though.

We had a bitter lesson to learn. The buck kid we bought, Horrie, had to be put down. We found out the hard way that you have to be very careful hand raising bucks. Despite all the warnings we treated him as a pet when he was young. As he grew his playful bunts became more and more vicious until he ended up savaging me and the boys every time we let our guard down. He also used to give the does a hard time, always butting them, sending them sprawling. It was a heartbreaking decision but we had to have him put down for everyone's sake.

So to all novice goat keepers, never let a buck kid 'play' butting. Always train them early to lead and always keep the upper hand no matter how cute and friendly they are as babies. That cute little bundle will soon be about 150 lb and 10 times stronger than you.

Two of Horrie's daughters are going in their first cashmere show next month. It will be very good experience and I hope to learn a lot by seeing all these champions.

We have since bought a new buck with a pedigree as long as your arm. He's very easy to handle too.

Our ex-battery hens are still here, all but one that died. Three have become foster mums to clutches of bantam eggs. We started with 3 chickens hatched by Gertie. One rooster and 2 hens. Since then we've had over 30 bantam chicks, most grown to maturity, some cockerels going in the pot. Not much meat on them of course but very tasty. I've even learnt to kill and dress them myself. Pretty good for an ex-city girl who used to be squeamish about squashing a spider!

Love to hear from anyone wanting to write. I'll answer all letters. I had a lot of lovely letters and a few meetings with wonderful GR folk. Hi Tony, Betty and Ian — I've not forgotten, I'll get out to your place one day.

**Robyn Heather
'Driftwood'
GULGONG 2852.**

Feedback Link-Up Feedback

Dear Meg,

Irene Maxwell's article on weeding was most interesting. I had a **PROBLEM WITH THISTLES** — half of my ten acres was disappearing underneath them. A pension, so no money to pay to have them attended to. Bad back problems, so I couldn't do heavy work. In April 1986 I decided I'd just have to tackle them before they got big. Every day I went out, and after some trials, set a daily target of 250 thistles. I found I could do that number and recover to do another 250 the next day (with half an hour of lying on the floor). This took about 20-25 minutes of weeding. I scraped the thistles out with a shovel, while they were small, and got almost 10,000 thistles. The crop of thistles in that particular area is very small this year — I've had to hunt to find a couple of hundred of them. I've begun on another area this year, and I'm getting them almost at the 2-prickley-leaf stage, when I can hand weed. Most of them, I know, would not reach maturity, but it is much easier to pull 50 tiny thistles rapidly than strain to dig out a clump of mature plants. There is no problem in disposing of them, for they rapidly wither on the surface. In respect to size I disagree with Irene, the smaller they are, the easier to remove.

**Maureen Barton
RMB 228
MANJIMUP 6258.**

Dear Readers,

In reply to Rafal's letter (GR 60) regarding **MARRYING ASIAN WOMEN**. I believe that a more just comment would be that a woman of any nationality would be a happy and good wife if a man was kind to her and blind to her faults. I am not against Asian women (I am one myself) just that I am sick and tired of people treating Asian women as different from other women.

**Lucy Yeong
PERTH 6000.**

Dear Grass Roots,

I am trying to build a **COVERED WAGON**. I have been doing a lot of reading but can't come up with a set of plans for any such vehicle. So I was wondering if any of you have information on this kind of thing or can suggest someone I can write to for some ideas or help.

**Dennis E. Bailey
86 King St
Hikurangi
NORTHLAND NZ.**

Dear Readers,

Mike and I live in Gladstone at the moment, but when the farm is paid off in 1½ years' time we will move to it at Byfield. We go up every weekend, take a load of horse manure, or bales of hay. The farm always rewards us with as big a load of pawpaws and passionfruit (commercially) and lots of other fruit and vegetables for ourselves. At home we grow more fruit and vegetables and orchids.

Can anyone help me with information on stone ground electric or hand **FLOUR MILLS**, to mill hard wheat, as I have been told hard grain is grown in nondeficient soil and also contains more protein. If soil is mulched and has lots of worms in it could it still be deficient in minerals such as zinc and selenium? Which is the **UNSULPHURATED black strap molasses**? (What does black strap mean?)

Which would be the best **FRUIT DRIER**, solar or electric? I don't have a lot of time and don't want to use products to help dry the fruit. I particularly want to do mangoes. What chemical has been used on commercially dried fruit, especially apricots, peaches, pears and sultanas? I read a while back in GR that you could submerge windows and doors in a bath of caustic soda and water to remove old paint, would this damage the glass?

**Elaine Bultreys
9 Grayson St
GLADSTONE 4680.**

Hi Everybody,

Like everyone else who writes in, we would just like to say what an inspiration to us all GR is. We are three, thoroughly inexperienced females, who would one day like to own dirt to call home. Thus this letter, as we have a lot to learn. We all own motorbikes and are currently travelling Australia in search of knowledge. We are hoping there are some people who might have the **TIME TO SHARE AND SHOW US THEIR LIVES**. We would love to help out in anything and any way, for experience sake, maybe in return for a place to set up our tents, or just a cuppa and directions for that place not to miss.

Well that's about it, so keep up the good work everyone and keep loving everything.

**Alison, Pamela and Simone
C/- 51 Exeter Rd
WAHROONGA 2076.**

Dear Folk,

This story will not include all of you, but it will include a lot more people than you may realise. It's about **INFERTILITY** — the inability to conceive or carry a pregnancy through to a live birth. 1 in 7 couples have fertility problems.

There is no single response to infertility, just as there is not a single cause. Each person's experience is different. However, infertile people do share a common desire — to have a child!

There are now support groups throughout Victoria, at Cranbourne (03-703-1179), Eltham — Research (03-437-1327), Box Hill (03-846-3920), Lakes Entrance (051-565-578), Warragul — Moe (056-235-581), Rye (059-889-459).

The purpose of a support group is to provide a safe, understanding atmosphere where people can talk about their experiences with infertility. It may help you to feel more confident about talking to other people who may ask you about having children. You may feel reassured that your feelings are normal. You have a chance to help someone else by showing you understand and care about their feeling. Most of all they are supportive, positive and constructive.

The experience of infertility is one that we are not prepared for — it can push us to the edge both physically and emotionally. We found out that we had an infertility problem over two years ago now. I say 'we' because even though it is Frank who is infertile it is 'us' because we are a team. I have a 5 year old son from a previous marriage but as we have all been together for four years now, Frank and Scott are very close.

Some people find it hard to understand why someone with one child cannot just leave it at that — I personally love my son more than anything and I do know how lucky I am, but Frank hasn't experienced what it's like to see a new life enter the world. Imagine just for one moment those of you with 3 or 4 children what it would be like without them. Some might say 'Ya hoo, peace and quiet!'. But — no laughter, no tears, no happiness to see you through all your years.

If anyone is interested or maybe just needs someone to talk to, please write. Peace and happiness to you all and thank you to everyone who wrote to us, after our letter some time ago.

**Susan, Frank and Scott Sambucco
54 Carlslake Ave
BLAIRGOWRIE 3942.**

Dear Grass Roots,

I have just finished reading a letter from Susi Vesnaur of Baulkham Hills, about **THE MEDICAL PROFESSION ESPECIALLY WESTMEAD**. My family (husband and three children) live in the Hunter Valley, my six year old daughter has Cystic Fibrosis. After trying many hospitals in the area, we finally tried Westmead Hospital, and if it was not for the 'over-rated medical profession' as Susi calls it, my child would be dead. As for only hearing of their achievements, I'm glad as we heard of a breakthrough with CF on the TV. It was one of the happiest nights of my life since finding my child had CF, because all I lived on was hope. I cannot speak highly enough of the Staff and doctors at Westmead, and also of their kindness. As for alternative medicines we also use these at home.

**Shelley Bennett
C/- Paxton PO
CONGEWAI 2325.**

Dear GR Readers,

In GR 60 in article titled 'Down to Earth First Aid' paragraph **FIRST AID KIT**. Anonymous says 'a more comprehensive kit could also contain: COTTON WOOL... NO! If you need something to dab at cuts and grazes then use some gauze or handkerchief or clean rag. Cotton wool will invariably leave little bits of wool in the wound.

More importantly never use cotton wool when bandaging a bad wound, use a pad of folded cloth or gauze. Because when you do get to a doctor or hospital the first thing they will do is 'unwrap' your dressing.

Cotton wool mixes easily with blood and the clear liquid that forms a 'scab'. Reopening a wound to remove cotton wool is painful as well as retarding the healing process. Otherwise an excellent article.

**'One Who Knows'
18/11 The Avenue
ST KILDA EAST 3183.**

Dear Meg and David,

Someone may be interested in this fact. I put a teaspoon of **GARLIC POWDER** in my dogs food (3 dogs) and it keeps the **FLEAS** away.

**J. Bones
PO Box 742
INVERELL 2360.**

WATER — OUR PRECIOUS LIQUID

When you consider Australia is the flattest continent on earth and the driest in proportion to size it's not surprising the importance we place on water. It is not really an issue for city dwellers, but for country folk water, or the lack of it, determines every step they take. Cereal crops, livestock, orchards, even a lawn and garden, depend for their very existence on the vagaries of nature. Whether the event is as simple as a bath — or as life-endangering as breaking down in the outback — we're still thinking, acting and talking about this vital fluid. Three GR readers write about their struggles to obtain an adequate water supply and, although their experiences may be amusing, underlying each of them is the basic premise — we must have water.

God Bless the Water

by Cheryl Diane Westbrook, Glen Ellen, California, USA.

'Who is going to get rid of that?' asked my husband, pointing through the driving rain toward the small caravan perched at one edge of the two-acre parcel. Thin peach-coloured curtains flapped from an open window. 'Well,' he murmured, 'I could always torch it into pieces and haul it off'.

The caravan and the two-acre parcel were forgotten. Even the clunks of clay stuck in our boot cleats were soon only a messy memory. Yet, one incident remained. I alone had been privy to it. Within the stormy mountains that day, where this property is located, a steep mountainside rises across the canyon. It was upon the face of that mountain, I saw the light. Somehow it had punched through the dark layers of clouds. Shaped like a pyramid, loosely sloped, it moved, appearing to point, along the same parallel across from where I stood. With excitement, I called to my husband to look, but the light seemed to hear and shyly disappeared.

Quite by accident, six months later, I saw the same land again for sale. This time it was a dry sunny day. What had been curtained by silver rain, was now a cathedral view of three mountain ranges, and a softly rolling green valley below. Across the canyon, where I had seen my guiding light, I now saw giant trees scraping the sky, and forest so wild surely dinosaurs were the last to touch it. Yet it touched me . . . somewhere deep in my centre of beauty and awe.

It took some persuasion to convince my husband I was not nuts wanting him to look again at that same property with the 'awful broken down caravan' as he called it. Well, we bought the property, I'm sure, mainly due to that white light.

Before the final signatures, however, we had a local well company come up and pump our well for four hours to test if it was good. All that precious liquid spilling down the hillside as though our well were other-ended in a deep lake. We were reduced to a minnow pond, though unbeknownst at that time even to ourselves. Such are the ignorant, albeit good, intentions of city folk learning country ways. We turned off the valve, convinced we had ample water, and handed over our life savings.

The leftover caravan was now our best friend. In fact, because of it, we would soon live on the land until the time came to build our house, maybe two or three years hence.

It was camping, accurately so, as we worked at making the caravan liveable. Now began months of hauling heavy ice chests the distance of two city blocks while sinking into mud . . . that was better than having the car sink into mud. We kept pushing uphill through the mud because to look up was to know the blessing of wild country views.

The caravan, 35 ft long and 8 ft wide with much of that gone into cupboards, beds and a couch, left us walking sideways like crabs down the hallway, if we may call two human steps worthy of the name 'hallway'.

The installation of electricity was a simple matter of climbing a pole after nailing rungs onto it to serve as steps, and securing braces to the ground from the pole's top.

The telephone required first sinking a beam, which was snapped like a toothpick a week later when a big truck strayed down our little road. A crew came from the phone company to repair the damage and all I lost was a few wild irises under the phone man's big feet.

With the delivery of a water heater, stove and refrigerator, we had enough comforts to move in. No more freezing water from the tap; no more spluttering Coleman portable stove; no more blocks of ice. The 'who is going to get rid of that' had become our country shrine.

The water's chemistry became the next item of despair. After several trips to a water analysis laboratory and subsequent calls to water systems companies, we learned that for a mere \$5000 we could correct our water's deviations. We don't drink anything but our own distilled water anyway, so we decided our clothes and water heater and pipes could take the water's eccentricities with a little help from on-site filters at various stages along the pipe. So far, this seems to work.

Then, one day I noticed sand in the sink. Next our pipes began to dry heave. My husband and I looked at one another with dumb blank city stares.

The well folk came out and removed a large burned out pump from the bottom of the 200 foot well. Anxiously, we looked down the skinny hole now opened for repair. It allowed us a view of about one foot, preferring to keep its deeper secrets to itself.

40 feet of additional pipe was added along with a sparkling new brass Jacuzzi pump. Eureka! Water! God bless the water! A city water main, and all our life training hadn't prepared us for life on a country well. How I've learned to love rain clouds where before I wanted only Bahama blue.

We added another machine to our well system called a 'brain'. This told our new and expensive pump to stop pumping if there was no water. This was an infinitely better arrangement than a poor pump pumping itself to death and still not giving us water. Actually, I think God alone knows for sure what goes on in the dark murky bottom of a well.

Frequently, the nomadic waters didn't allow enough for a full load of washing (50 gallons) and it was back to the old

college days of laundromats, with all that loose change, cheap detergent, and clothes spilling from the basket when I turned the corner, then the basket rolling around like a loose ball in the back seat. Yet, it was all in the name of living here on this rare dinosaur of a mountain egg, and even the local laundromat was worth that.

'Sailor's Baths', as they are called, became pre-eminent in our lives: Turn on the tap, get wet, turn off the tap. Lather, turn on the tap, rinse, turn off the tap. The same process again, this time careful to lather between the goose bumps.

Even these manoeuvres left one at times with shampoo on the head and air hissing from the tap instead of water. This meant standing for 20 minutes between pumpings to allow some time for water to come into the well. But, remember the birds singing and the butterflies fluttering and all the magic of nature untouched by humans — that helped the shivering.

Suddenly, another light dawned and we decided to purchase a holding tank of 2500 gallon water capacity. The purpose? To eliminate shampoo caught in the hair and those awful laundromat trips. The theory was that with the holding tank, the pump could grab the water on its way by and store it. Floats would tell the tank when it was full at which point the well could rest until we used water, causing a need for replenishment. This arrangement would be the panacea since otherwise, when we weren't using the water, it just passed on by with a wave.

The tank was custom built of fibreglass and looks completely like a huge tar dixie cup. I've planted Carolina Jasmine (deerproof I'm told, but that's another story) and anticipate an eventual show of blazing yellow to vine over our peculiar looking water holder.

On the delivery day, the builder brought his chubby young son along. While my husband and the builder struggled with the water cup, the son pulled up my newly planted cactus, quitting just as I was ready to rush out and beat him with my broom. A lucky escape all round!

Next, after much negotiating for a price, along came a very large water truck full of water from the city main to fill up our dixie cup. The truck weighed as much as a house and left its mark indelibly upon our delicate blue shale road, newly installed. So, one full holding tank of water later and a partially destroyed road, we have enough water to wash the shampoo from our hair. One would think we had finally arrived at the pearly gates of satisfaction . . . but to be so presumptuous is a sign of a city person not countrified . . . not even yet. Now I'll tell you what happened next. When not using water, my husband noticed the water level in the holding tank was sinking lower and lower and lower. Why, oh why? We don't need ice cubes flown in from Paris! We only need enough water to wash the shampoo from our hair!

Shutting valves taking the water from our newly delivered supply, we began diagnosing. Why was the water level dropping, dropping like the famous names status seekers pretend they know.

We took stop watches and began clocking the machinery, now ample in number with the additional pumping of our tar dixie cup. Even when we weren't using water, it seemed the pounds per square inch, known as psi, was dropping from 60 to 40 every 45 minutes then sending relays to the various

machines telling them we needed water replenishment, whereupon the equipment clicked on and sucked one inch of water from our tank and sent it where?

A leak! Yes, the well company confirmed it, and now it became a matter of somehow divining where, along two city blocks of piping buried 1½ feet under the surface, it might be. Neither my husband nor I cared to abuse our bodies by digging up two city blocks of earth.

To conquer this leak, we shall replumb our rather expensive excontractor's job of installing leaky pipes and go above ground the same distance with new piping.

Until then, we run outside to turn the valve on and off when we need water . . . and only long enough to get the water we need so as not to squander our precious, not to mention expensive, liquid.

Today, our well site looks like a computer terminal for a rocket launch. But, countrified now, we are so smart about water usage we could survive in the Sahara. In fact, for the house, when we build it, we're thinking about a revolutionary system whereby the water used for everything but sewage will empty into a holding tank and can afterwards be used again for the vegetable garden I plan to grow here in our mountain cathedral. But this is really up to God — his white light pointed the way, and I hope it means we will stay, even if I have to hire donkeys and haul water in pottery jugs the two twisty miles from the valley below.

At this point in time and life, I figure the world would have to run out of water to get me off my mountain.

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The Right to Draw Water

by Sue Jenkins, Kangaroo Flat, Victoria.

It's hard to imagine now how awful our dam looked last February as we sit on the bank watching the rippling water of the spring rains. But back in the heat of summer the water was only knee-deep. So we decided to have the dam made deeper and apply for our Stock and Domestic water allocation.

However before the water actually reached our boundary, we had to clear a five-kilometre clay channel of bush mulch, gravel and scrub. As we hadn't done this for two seasons I wasn't looking forward to it. Geoff contacted the water bailiff who later notified us of the date our water would be coming through. In preparation we spent a few days clearing the channel but the day we'd set aside to check the creek dissolved in a myriad of more pressing tasks. When we did make it to the head of the creek around which our channel should have skirted, we were dismayed to discover that the creek had eroded back through our channel since we'd used it last. Our precious water was headed for a thirsty creek bed.

Hastily we decided that a piece of corrugated iron propped into position would bridge the gap. After roughly clearing the channel nearby we headed for home planning to clear the rest as the water came down.

The next day, delivery day, dawned clear and hot with an expected maximum of 36 degrees. So, loaded with hats, drinks, food and two sleepy children, we set off early to drive to the concrete race on 'Break-O-Day' hill. At our metal floodgate we would begin our work for the day.

The bailiff, an early riser, had left by the time we found our number, leaving the water slowly snaking its way along the channel on the first stage of its long journey. But something was wrong, the water had stopped. Jumping down into a deep section we found the high spot. 'Where's the mattock?' asked Geoff. 'Oh no, don't tell me we left it at the shed?' While the kids and I did some ineffectual chipping, Geoff drove back.

An hour later, while I was working past a sapling, a spitfire caterpillar left its painful mark. 'Where's the cream?' — You guessed it — back at the shed. I decided that shorts weren't ideal for bush-bashing even if it was hot.

No matter what kind of condition you find yourself in, it's amazing how kids can make their own fun. That day was no exception. Kristie shuffled up to me, 'Mum . . . I've lost my thong'. Continuing to dig I mumbled 'Look back along the channel'.

Kristie persisted 'I have and it's not there.'

Irritation rising I replied, 'How could you lose it?' A flicker of humour crossed her face as Kristie explained 'Well . . . we were playing ships in the channel and the thong disappeared. Has it passed you?' I looked at the dry channel where I'd been scraping and couldn't help but laugh. After much fumbling in the debris we found the sunken vessel.

More scraping and shovelling with backs growing stiff we paced ourselves to the next large tree where the drinker waited invitingly. As the heat waves rose from the green bush around us, a gentle breeze wafted over the ridge cooling our sweating bodies. Thank goodness for trees. The children kept cool by wading in the channel while scooping out the leaves.

A slight downhill run brought about the unexpected as our tiny stream became a series of tinkling waterfalls.

Taking turns to walk back and drive the car up to where we were working gave us a welcome break. It was reassuring to have a vehicle nearby and so helpful in carrying the rest of our things. Lunchtime found us in a shady spot with our hot feet soaking in the channel as the water moved around us. The dog stretched out in the water wondering at our lack of sense.

After a brief rest we worked on into the heat of the afternoon with the promise of a swim in a neighbour's dam not far ahead. Mike and Kristie had become our water-bearers, sampling the contents of the drinkers freely. The refreshing swim helped revive our flagging spirits and dripping wet clothes kept us cool a little longer.

As the sun was setting we plodded to our boundary fence, shovels trailing, drinkers empty. A cry of delight rose up from the dam ahead of us. The kids and the dog had beaten us to the corner dam. Geoff and I fell in to emerge with sighs of relief. Suddenly we started to laugh and our voices rang back from the tree tops. The joke was that the shallow dam had coated us with stockings and masks of mud. A new fashion we decided — dam-bank brown. We dripped the rest of the way to the shed enjoying a feeling of achievement as we compared our blisters.

But at 5 a.m. the next morning I was shaken out of an exhausted sleep by Geoff. He'd woken up earlier expecting to hear the sound of water trickling into the dam but all was silent. He walked back as far as the creek and found the cause. Waking the kids to explain where we were going, loading the trailer with more corrugated iron and watching the car lights searching their way through the shadowy bush, seemed like a crazy dream. At the creek the torch beam revealed the fallen prop and the water gurgling under the iron. So it was mattock work for Geoff's blistered hands to form a curve further back in the bank which would house two pieces of iron. However the water still laughed at our efforts, seeping under the edge of the iron. Totally frustrated and on the point of giving up, we remembered the plastic covering the mudbricks. This proved to be successful with a few rocks and some gravel to weigh it down.

By mid morning we arrived home to watch the water flow into our dam. Geoff claimed the divan and was soon asleep. But I couldn't miss the show. Cuppa in hand I found a chair and set it up beside the dam. The children rushed to find their plastic tubes but then decided to play dams and channels.

Several days later, after keeping watch over the channel, our dam brimmed full of clear, cold water. So began a new routine, the water drawing us and the wild creatures to share its coolness. The folding chairs became permanent on the bank as we watched the birds take their evening drink or enjoyed our evening swim at the end of a hot day. Our tired orchard and vegetable patch developed a deep gloss as the tiny pumpkins began to swell on the vines. Sometimes an early morning walk would reveal a mother kangaroo and her joey drinking delicately at the water's edge and wearing a mantle of early morning sunlight.

When I remember all the aches and scratches we suffered last summer I can't help wonder. With all our effort we only maintained the channel. Who were the tough individuals who originally dug and carved it out of the rocky hillsides and prickly gullies? Who calculated the fall so that it would always

go downhill? It seems that so much of what we do is building on the work others have done before us whether good or bad. But to the men who built our channel I say thank you, because I've come to realise that water is the source of all life. (And it makes the effort worth while.)

Turn Off That Tap

by Megg Miller, Shepparton, Vic.

'You're from the country aren't you' she said as we stood side by side in the bathroom of a city hotel, 'I can always tell, you all turn the taps off when you clean your teeth'. Country people not only turn the taps off after wetting their tooth brushes but learn to take turns with the same bathwater and then use it again for floors or watering the garden. For many of us in rural areas it is more precious than gold — if water runs out life runs out. For the optimistic multitude hell bent on going back to the land the need to conserve water may bring the first jolt to their romantic dream; no one ever really tells them about life in the dry country and anyhow, enthusiasm and youthful confidence deafen them to practical advice. We moved to the country fifteen years ago and our major crises have not revolved around money, equality or the meaning of life but the number of 'rings' left in the tank and the effects a lack of water will have on us.

Our first house was in a small country town, a brave little place amidst dry parched paddocks. There was no town water of course, the houses were all on tanks and those folk who had put down deep roots and lived there many years had built massive concrete storage units with enough water for even the driest years. Our little rented house sported two small tanks and quickly introduced us to water consciousness. As a new bride I struggled with self imposed water restrictions knowing that I would be judged by the neighbours not on my white wash but on the amount of water left at the end of summer. I splashed in inches of bath water and then carefully ladled it over struggling vegies and further conserved water by filling the washing machine just once, and reusing it for each load. The fact that our jeans could probably stand by themselves mattered little but I recall one event from those days that still leaves me pink with embarrassment. Tired, I'd decided upon an early night and was just preparing the hot-water bottle when I heard a knock. My visitor was the daughter of an influential family in the district and I had no option but to ask her in for coffee and a chat. The kettle had just boiled but I was too embarrassed to say 'we can't drink that, it's recycled hot-water for my hottie' so mutely made drinks from it. Just as tea takes up the flavour from the leaves so does water stored regularly in a rubber bottle and it was obvious from the taste it had been recycled many times. I'm not sure that it helped all that much with our water conservation but it did put an end to a budding friendship.

After that we lived for a year or two where the water ran freely and I blush to admit there were times when the bath almost ran over. It was a joy to be able to soak weary bones and then listen to your tiredness gush along the drain outside. Our garden grew by the hour and in summer we all lived in fear of what lurked behind the jungle of sweet corn and

pumpkin vines. It was a sad day when we had to leave it, for ahead of us lay more house tanks and the dry country.

The move brought us to our present house, which offered the standard two small house tanks plus the bonus of a windmill and storage tank. Our joy at this seemingly unlimited supply of water soured when we found it undrinkable and so corrosive it ate through a jug element a week as well as having already reduced the innards of the hot water system to red dust. But it was water and it allowed the house tanks to be kept for better things. Alas, months later we came out to find this tank in a state of collapse and all we could do was turn the windmill off and catch the last few gallons in a pathetic assortment of containers. It's quite remarkable the speed at which a tank will empty compared to the time it takes to fill!

The demise of our farm water meant we now had to bucket it up from the dam, a short 100 yards going down but a long one coming back. And, as if that wasn't difficult enough — there was a barbed wire fence to be clambered over midway. We carried those buckets for several years and I'm sure it worried our visitors more than it ever worried us. After we installed a pump a few years later with hoses for the garden and automatic waterers for the stock, I remember complaining about my lazy life and all the spare time I suddenly had.

Summers were always trying but they were harder when I had a young child. It was difficult impressing upon a little one the need to conserve water, difficult explaining why there wasn't enough for water play or why the bath couldn't be let out till everyone had had a turn. But children are keen students and so impressed with it all was my daughter that when she accidentally let the bath fill up one year she was inconsolable and begged me never to tell anyone. I think she still lowers her voice when we reminisce about it. The experience most sharply etched in my mind concerning waste occurred during the last drought when every drop was precious. Overseas visitors had dropped by and the lady was helping me prepare lunch. Picking up some potatoes to boil she unthinkingly washed them under *running* water. I recall almost crying as I watched this virtually clean water gurgle away.

Whilst writing this there has been a steady drumming on the roof. The tanks are overflowing, the dam full and it looks good for summer. But in the bathroom I still place a bowl in the handbasin to catch hand washing water and I still feel criminal if I don't wash clothes in the bath water or keep it for the garden. But I do allow myself one little luxury — I only use the same hottie water for a couple of nights and I make quite sure I empty the jug thoroughly afterwards. Can you imagine pouring rubberised hot water into that first cuppa of the day?

Durable Coiled Baskets From Grass

by Jose Robinson, Wild Cattle Island, Qld.

For someone who is looking for an inexpensive but useful craft, grass weaving is surely the way to go. The grasses cost you nothing except effort to collect. Most people would already have a large darning needle in their sewing kit, so the only expense is the raffia to bind together the coiled grasses. A coat of clear varnish on the finished articles makes for a very durable and firm finish. Most handy-persons can usually lay their hands on a half used tin of varnish somewhere in the workshop at home.

Over the years, I've made countless baskets and containers of all shapes and sizes from Blady grass. In New Guinea it is known as Kunai grass. Some of my baskets I've had in use for many years, others have been sold or given away to friends. On occasions when I've been out of raffia for binding, I've used wool, string, or anything I could lay my hands on suitable as a binder. However raffia is the best and most suitable for the job.

Raffia

Raffia is the tough underneath part of the leaves of the Raffia palm which grows in South America. It is dried and sometimes dyed. It comes in bundles of lengths of between one and two metres (3-6 ft). I use only the natural undyed raffia, because then when the Blady grass too has dried, the basket is all the same neutral colour. Raffia can usually be purchased from large craft suppliers.

Collecting the Grasses

Scissors, knife, secateurs or even hedge clippers are suitable to cut the grass. Blady grass grows in most states of Australia, and is frequently found in sandy soils. The grass in our area grows just back from the sand dunes, and the length is approximately 60cm (2 ft). This would vary from place to place. Naturally you want the longest grass possible for weaving, so cut it close to the ground. Keep only the lush green grass, and dispose of all browned off and dead pieces.

Tie in bundles and it may be used straight away while green. It is a good idea to wrap the bundles in a pillow case or newspaper, if weaving a large project, to prevent them drying out too quickly. If you wish to store the grass for more than a few days, then it must be steeped in warm water for at least half an hour before using. This makes it pliable again.

Making the Basket

BEGINNING

There are three ways to begin a base. The easiest way for a beginner is to use a plywood base cut to desired shape and size. Small holes should be drilled around the perimeter about 1 cm (½ in) in from the edge, and approximately 1 cm apart.

The first row is begun by taking a bundle of 5 or 6 strands of grass and laying it around the outside of the holes. With one strand of raffia threaded through the large needle, begin by lashing the first bundle of Blady grass firmly all around the base. For the second row, begin a glove stitch into each stitch of the previous row, adding more grass as you go. Glove stitch



All baskets trimmed with gum nuts of various sizes.

Coiled baskets from Blady Grass.

1. Planter holder.
2. Sandwich tray.
3. Sandwich tray.
4. General purpose small bowl.
5. Double platter for crackers, and dip basket in the middle.
6. Sewing basket with domed lid. Hinge made of leather, and toggle fastener.
7. General purpose small bowl.
8. Sewing basket with domed lid. Hinge made of leather, and toggle fastener.

is formed by taking one stitch over grass and into the stitch in the previous row. Repeat again into the same stitch. This stitch forms a little 'V' shape pattern, fanning out from the base. Continue weaving in this manner until sides reach desired height.

SHAPING

Shape and coil grass as you go by pushing it into position firmly with the fingers. If the basket is to have straight sides, then each row must lie evenly above the previous one. If you wish to make the sides slope outwards, then each row must be laid OUTSIDE the previous one. If the sides are to slope outwards first and then inwards, the rows must initially be laid outside each other, then gradually mould sides to come back narrower by laying grass on the inside of each previous row. Add only one or two strands of grass at a time and stagger the joins.

A ROUND WOVEN BASE

To make a coiled grass base, begin by taking a few strands of the Blady grass. Hold in the centre with the ends uneven, and twist these just sufficiently to keep them together. Make a small ring between the tip of the index finger and thumb of the left hand, cross the raffia ends at the top and gather them into the palm of the hand with the remaining fingers. Put the

threaded needle through the top where the ends cross, draw the circle up very small and bind over from left to right, fastening in one set of ends until it meets the other set of ends. Now take one or two winds behind these, gather both sets of ends together, turn them and continue working over both from right to left this time. Bind three times and fasten to the circle below with a stitch. In this work, always bind away from you and make the side of the work facing you, the right side. Now proceed with glove stitched rows.

AN OVAL BASE

An oval base is started by first holding the grass in the shape of a hairpin. Now fasten the threaded strand to the loop and weave over ends from left to right until required length is reached. Turn the ends together and proceed from left to right. The centre should be counted as two coils and the finish made at the top left hand corner of the oval. Now proceed with glove stitched rows.

FINISH AND HANDLES

For baskets with handles, fancy woven top edges may be used for a neat finish. However for bowls or baskets with lids, just the glove stitch is satisfactory for the final row. A handle may be made by binding a group of grass strands together, leaving a loop each end. Attach temporarily with a few stitches in the desired position onto the last coil. Now continue coiling basket for one row **INSIDE** handle, and the next and final row **OUTSIDE** handle. Finish off end neatly and clip off any excess grass in a tapering end. The handle should now be firmly held in place, and the temporary stitches may be removed.

DECORATIVE FINISHING TOUCHES

Baskets or bowls may be decorated with pine tree cones, sea shells, dried flowers or seed pods. I mostly use gum nuts of various sizes for decoration, also adding a couple of life-like leaves made from green, brown and bone suede or similar.

Finish baskets with a thin coat of clear varnish both inside and outside and leave to dry. The varnish helps to keep the baskets stiff and durable. After being used to hold foodstuffs, they may be gently washed, or simply wiped over with a damp cloth.

Coiled Blady grass articles which I have made include sewing baskets with lids; fruit bowls, egg baskets, flower baskets with handles, planter holders, sandwich trays, shallow double bowls for crackers and dip. The dip basket needs to be lined with throw-away foil to hold the dip. Many multi-purpose baskets and containers may be made using coiled grasses.

Coiled basketry is a very portable craft, and is not messy. It may be carried out in the living room or in the garden, or even taken with you on outings. Even the children can cope with simple small items. They make great inexpensive gifts.

HANDY HINT

The best way to keep a cake fresh for the longest possible time is to store it in an airtight tin with a slice of bread. The bread needs to be replaced as soon as it goes hard. A piece of apple is equally effective.

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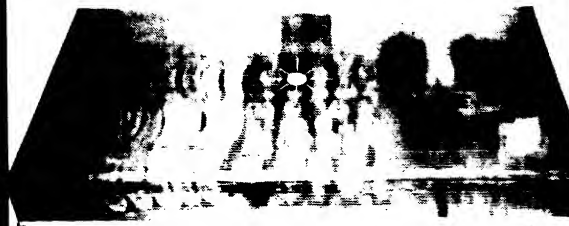
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Nutritional Needs of the Female

by Blackmores Communication Service, Sydney, NSW.

While the political battle rages on the equal status of men and women there is no doubt that the female requires greater amounts of certain nutrients like calcium, iron, folic acid and other micro nutrients to maintain her optimum health and physical efficiency. Though the male, through past centuries, has been regarded as the stronger of the two sexes, fortunately for him, he does not have to endure the physical and psychological stresses and trauma of pregnancy, lactation, menstruation and the menopause.

Nutritional anaemia is one of the most widely occurring deficiencies according to the US Department of Agriculture 'Benefits From Nutrition Research' report (1984). These anaemias are most likely to develop during the periods of rapid growth, such as infancy and adolescence and during the child bearing years in women. During these stress periods, it is difficult to select a diet to meet the increased need for iron for instance. Anaemia due to iron deficiency is presently recognised as the most common type of nutritional anaemia.

Calcium and Osteoporosis

Osteoporosis is a disease of the bone characterised by increased porosity and softness in which the amount and strength of the tissue has been decreased. The bones are susceptible to fracture in severe cases even under normal mechanical stress such as giving someone a hug.

Recent surveys indicate that osteoporosis is more widespread than arthritis and about three times as common as diabetes. Dietary calcium, phosphorus, vitamin D and possibly magnesium are thought to be the most likely nutrients involved.

Osteoporosis is also known as post menopausal demineralisation of bones. In the past the emphasis was mainly on how the hormones would change the body with increasing age. For instance, 'the decreased amount of sex hormones result in decreased maintenance of the bone matrices', according to Benjamin T. Burton, PhD National Institute of Arthritis, Metabolism and Digestive Diseases. In recent years chronic calcium deficiency has been recognised as a major factor in osteoporosis as evidence has accumulated that the skeletal demineralisation may be the end result of prolonged incorrect calcium balance and insufficient calcium intake, which occurs in people who have a higher than normal calcium requirement, those who have an absorption problem or those with an inability to adapt to an inadequate dietary intake in the first place.

Calcium makes up about 85 per cent of the mineral matter in bones. It is taken into the body as a constituent of various foods. While much of it may prove insoluble and escape being absorbed some of it does pass through the intestine into the blood where it can be found by chemical tests. If calcium in the blood rises, you feel depressed and your heart is slow, if the calcium sinks below these figures you may suffer from twitching and spasms. Absorption of calcium is facilitated by the presence of vitamin D and by a low intestinal pH which helps to keep the calcium in solution. Normal secretion of

hydrochloric acid in the gut is thus necessary to facilitate efficient absorption. Vitamin D can either be obtained from your food or manufactured in the skin when it is exposed to sufficient sunlight. When calcium is in the blood stream, it is deposited in the bone under the control of a hormone released by the thyroid gland known as calcitonin.

The failure or success of bone growth and bone health depends upon the proper supply and balance of calcium, phosphorus and vitamin D. Large quantities of food like rhubarb and spinach, which contain oxalic acid, may interfere with the absorption of calcium. The phytic acid which is found in the bran part of cereals may form insoluble calcium salts with elemental calcium and so make some calcium unavailable for absorption. If you are increasing your bran or wholegrain cereal intake you should add to your calcium intake. Excess fat in the diet may reduce calcium absorption although small amounts of fat actually appear to improve calcium absorption. An excessive amount of meat in the diet provokes the loss of calcium in the urine and small amounts of calcium may also be lost by way of the skin during heavy sweating exercise.

Your bones are constantly being broken down and replenished. Calcium can be drawn from the bones and teeth to maintain normal blood levels during periods of growth or dietary calcium deprivation. Of course, when the calcium is removed from the bone by your body you must deposit new calcium. During the year approximately a fifth of the calcium in your bones is removed and must be replaced. A network of hormones maintains a constant level of calcium in your blood and other fluids. Some hormones like insulin and cortisone can influence calcium metabolism negatively.

The levels of calcium and phosphorus in the diet have an important influence in controlling bone makeup. The actual correct proportion of calcium to phosphorus in the body including the bones should be about 1:2. However the tremendous increase in the eating of high phosphorus convenience and fast foods by women has contributed to their consuming inadequate amounts of calcium in recent years. High in calories, these foods have added to the feminine waistline but have reduced the intake of necessary calcium, vitamins and other minerals. Unfortunately many of the popular reducing diets contain large amounts of protein and insufficient dairy products and fibre, and they have therefore insufficient calcium for their daily needs.

Calcium absorption begins to decrease between 20 to 30 years of age and various statistics indicate that calcium consumption is also decreased during this time. The loss of calcium from the bones is more rapid in the female than the male for various reasons. Since women have smaller skeletons they have less bone mass. Further they are more apt to avoid calcium-rich dairy products, believing they are fattening. In addition, after menopause the hormone oestrogen drops and is unable to maintain the balance between the deposits of new calcium and loss of calcium from the bones. Excess phosphorus not only interferes with calcium absorption but also increases

the need for additional magnesium.

Although osteoporosis is most apparent in older women it can develop at any age and in men as well. If women eat a calcium deficient diet over a period of 10 to 20 years the offset of osteoporosis is predictable. The average consumption of calcium is about 50 per cent below both the US and Australian recommended daily intake. Blackmores' nutritional researchers and naturopathic practitioners suggest that the recommended 1000 mg daily for calcium may still even be too low in some conditions of increased need.

Need for Iron

Iron is necessary for life, being an essential component of haemoglobin and essential for the formation of red blood corpuscles. Iron deficiency is a nutritional problem for the female, in particular, from teenage years to menopause. According to statistics over 40 per cent of women in the US have a marginal iron deficiency based on the recommended daily allowance. It is believed that the same conditions apply elsewhere, particularly in Australia. From 15 per cent to 30 per cent of the iron in meats and fish is absorbed compared to only 5 per cent from vegetable sources. Eating a vitamin C rich vegetable or fruit along with your foods containing iron will increase the iron you will obtain from your meals. Tea on the other hand when it is consumed with foods containing iron will interfere with the absorption of iron. The typical diet eaten by the average woman has about 6 mg of iron for every 100 calories. The average woman consumes about 1500 calories a day which may contain only 9 mg of iron which is half the amount recommended for menstruating women. The need for iron is also increased by menstruation, pregnancy, lactation and growth. The normal daily loss of iron in the adult male is about 1 mg while additional quantities are lost to women through menstrual blood, anything up to 28 mg per day, and the total daily loss of iron is about 2 mg for the female. The desired daily intake of iron should be far more than is currently found in foods today.

Role of Vitamins

Deficiencies in vitamins A, B1, B2 and C are the nutrients most often implicated in an unhealthy appearance of the skin. Women and young girls are most likely to benefit from an increased intake of these micro nutrients particularly if they suffer from skin problems such as acne, pimples, or an incorrect oil balance.

You can see that from the skin to the bones, the female is often lacking in those very nutrients that are essential for her optimal functioning. Fatigue, depression, poor skin appearance, bone loss, susceptibility to fracture, menstrual difficulties, muscle cramps and all the other complex ailments have been linked to feminine deficiencies in daily intake of calcium, magnesium, zinc, iron, vitamin A, the B complex vitamins as well as C and E.

Supplements

It is difficult to adjust your nutritional lifestyle overnight. Nevertheless we at Blackmores recommend to all women a diet of natural foods consisting of lean meats, vegetable protein or fish, turkey, chicken, eggs, dairy protein like natural cheeses, raw nuts, minimal wholegrains, a variety of

raw and steamed vegetables plus whole fruits. However, due to individual nutritional needs as well as problems associated with food digestion and absorption we also advise daily supplementation with a multivitamin and mineral supplement and also a special increase in the calcium and iron intake. In addition to taking supplements like these daily, you must consume the foods that provide all the prime nutrients. You have to be nutrition wise. Don't be calcium deficient.

Blackmores vitamin and mineral supplements are available at health food shops and some chemists and supermarkets.

MEDICAL ACCIDENTS

'Wall of Silence'

The December 1986 issue of the *Medical Consumers Association Newsletter* included a review of a Channel 4 Television programme recently screened in the UK called Wall of Silence. It dealt with the issue of medical accidents. If the situation is more or less similar in Australia then 60,000 to 70,000 medical consumers will suffer some form of medical accident this year. That means that anyone visiting a doctor for treatment more than 50 times in their lifetime is virtually certain to experience a medical accident.

The reviewer (unnamed) says that doctors have traditionally closed ranks on the subject, and points out that if airline safety were managed in a similar way Botany Bay could have filled up with 'missing flights' to and from Kingsford Smith Airport and we would not have been told of the matter! Quoting from the TV programme: 'People put doctors on a pedestal . . . They do not think they can change them . . . Many people believe that doctors do not make mistakes . . . Patients accept what they are told even blaming themselves for being slow healers or making an unnecessary fuss about their pain.'

The programme pointed out that doctors have difficulty facing up to their mistakes and often feel they are not accountable to anyone. Part of the problem are the medical insurance companies which are run by doctors and dentists who have told doctors that they should not admit to making mistakes because this could lead to being sued. From the programme, 'This attitude is totally unacceptable. Helping a patient come to terms with what has gone wrong is as much a part of caring for the patient as the original treatment and a doctor is under a duty to continue that care. Money should not come into it, that is why doctors are insured. They should be able to say what they like and if what they say shows that they have been negligent then the insurers will have to pay up.'

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SAPLING FENCES

by Jack Perry, Mole Creek, Tasmania.

When we bought our land it was covered with regrowth and we were faced with clearing a few acres before we could do anything about a house, sheds or garden. Although a bother at the time it all worked to our advantage.

We ended up with a great pile of timber that could be cut down for bush poles for fencing and building the sheds. Being tight for money by this time, the idea of recycling our own timber was appealing.

The trees we'd had knocked down were smallish — between about 15-25 cm diameter — but ideal as bush poles. All our early fencing utilised this timber, but it really came into its own when we fenced the house yard and orchard with sapling palings. Since we were keen to get on with the important business of growing things, we couldn't wait for the fencing poles to dry out properly. We found, though, that as long as we trimmed the bark away from any parts that were to go underground, and used wire ties rather than staples, green timber was reasonably successful for fencing.

To start with, we made solid corners from the thickest bush poles, which were also used at intervals along the fence, for strength and support. That was the easy part! Now the spaces between posts had to be filled in somehow. The 'palings' we used were small saplings and branches about 5-10 cm thick — all the bits and pieces left over after clearing the house yard. Roughly trimmed, these were wired onto either a sapling rail or a wire strained between the posts. Any gadget you can find to help twist the wire between and around the saplings will be a wonderful help. Ours was just a steel rod, but we would have been lost without it. We stood the saplings in a trench dug along the fence line, then filled in the trench to bury their bases. You can also fix a strip of mesh (30 cm wide) along the base of the fence, as an extra line of defence against the beasts that go chomp in the night.

We found that this fence would keep lambs in — or out. It also protected our precious vegies from chooks, rabbits and

hares and was strong enough (in appearance at least) to deter anything bigger from barging through to get at the green goodies. A high paling fence will even stop wallabies, who seem to see it as a natural obstacle such as a thicket of shrubs, something they would rather circle round than jump over. Paling fences are handy inside the garden too, for shade, as windbreaks or to support climbing plants.

Instead of saplings in some places, we used brush panels wired in bundles between the posts. Again, mesh is a good idea along the bottom of this type of fence, because all sorts of creatures find their way through the brushwood gaps with the greatest of ease. Of course, you can also use wire mesh fixed to wire or rails. This is much easier to erect and a very effective barrier, but it doesn't give you the same glow of satisfaction that you get from creating your own style of fence out of recycled materials.

Every time we look at our homemade fences we congratulate ourselves on a job well done. They're cheap, unobtrusive and make use of timber that would otherwise be wasted. We called it landscaping with litter, and ignored any unkind comparison to dogs' hind legs. Straight lines are unnatural anyway!

Weatherboard Preserver for Natural Wood

by Jenni Fenton, Camperdown, Vic.

This is an old family recipe for preserving wood that hasn't been chemically treated, painted or stained.

Ingredients

7 x 500 gr (1 lb) containers of Red Oxide. (optional — depending on colour required)

18 lt (4 gal) raw linseed oil

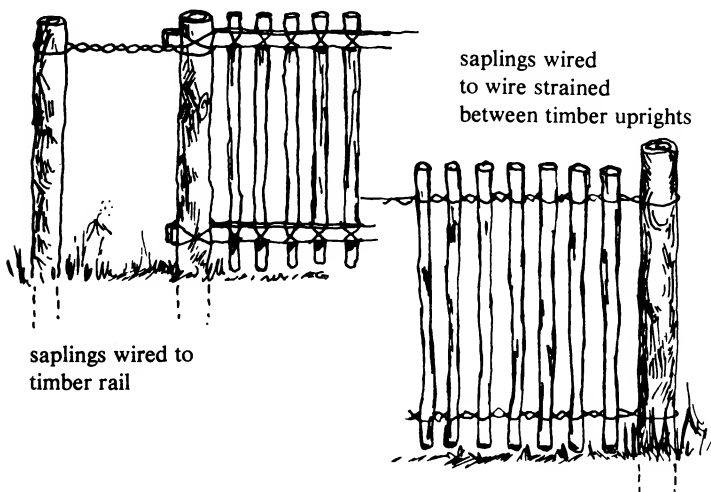
4.5 lt (1 gal) kerosene

Method

Have timber free from dust and dirt: it can be cleaned with standard petrol and let dry completely. Mix linseed oil, kerosene and red oxide in a rubbish bin and stir with a board about 15 cm (6 in) wide. Stir for half an hour — this seems a long time but the mixing is important. Apply with a roller or paint brush, depending on the size of the area. This coating will take up to a week to dry in cold climates.

It will penetrate into the wood, preserving it and is also an inexpensive method of colouring wood, ideally suited for veranda boards, paling fences, posts, wooden sheds and timber stock-yards. Any mixture that is left over can be stored in the rubbish bin with the lid on. I like to make up this quantity so that the colour is the same for a large job.

If doing verandah boards, rub with a clean dry mop when you think it is nearly dry. Straight raw linseed oil is also an excellent furniture preserver for natural pine lining boards.





COTTAGE GARDENS



PART III

by Megg Miller, Shepparton, Vic.

This issue we're looking at herbs to grow in the cottage garden that are attractive to look at but useful in some way as well. There are so many herbs around aside from the basic culinary ones that are aromatic, colourful, attract bees to the garden and can be used for all sorts of purposes from herbal stuffed toys for cats to dyeing your homespun wool yellow. Read on and discover what a wealth of beauty and usefulness there is to be found in the cottage herb garden.

Although most of us have grown up to believe that a herb must be either 'parsley, sage, rosemary or thyme' a herb really could be described as a plant useful or beneficial to humans. Such a broad definition could include everything from vegetables through to fruit, but we're really just looking within the flower garden and alighting upon a few favourites every garden should contain. If you don't know much about herbs start borrowing books from the library and sending away for seed or plant catalogues. With spring in the air it's time to set your cottage garden growing.

Herbs for Cottage Gardens

CATNIP — *Nepeta cataria*

If you are a cat fancier this herb is a must. Called *herbe aux chats* by the French it is a favourite of cats who love to roll and play in its downy grey leaves and become intoxicated with the roots. They have even been known to dig them up! A perennial, catnip grows between 60 cm-1 m high and can be propagated by seed, cuttings or root division. It's very plain looking but makes up for this with its aromatic qualities. The leaves exude a faint mint like odour and the tiny creamy flowers a rather pungent, bitter aroma. The leaves are well known for their medicinal properties — they have a quietening, sedative effect, especially on children, induce perspiration in times of fever or when getting a cold and help reduce flatulence. To use, make an infusion of 1 oz (30 g) dried leaves to a pint (600 ml) of boiling water, stand, then give children 1-2 teaspoons and adults 2 tablespoons.

Sow catnip seed in autumn in light soil and full sun. Cutting and root division may be done in autumn or spring. It is a plant that requires plenty of room to grow and plenty of space left around it for playful cats. It needs to be heavily cut back in autumn to keep it bushy and encourage masses of flowers next season.

There is a delightful variety called Catmint (*Nepeta mussinii*) that is commonly sold as a rockery or border plant. It is low growing, with pretty grey-green leaves and lilac coloured flowers. Both this and *N. cataria* attract bees to the garden.

BERGAMOT — *Monarda didyma*

This is an exotic and colourful addition to the cottage garden, and, because it can grow up to 1.2 m (4 ft) in height, it is best grown towards the back of a herbaceous border. A magnificent plant, it flowers in mid-summer with whorls of tubular flowers at the end of long stalks. Scarlet bergamot is the most well

Elizabethan Herb Song

*Plant me a garden to heal the body,
Betony, yarrow and daisies to mend,
Sage for the blood and comfrey for bones
Foxglove and hyssop the sick to tend.*

Chorus:

*Tansy, rosemary, rue and thyme,
Bring back the lover who once was mine,
I will give him the sweet basil tree
Then he will always belong to me.*

*Plant me a garden to heal the heart,
Balm for joy, and the sweet violet
Cowslips, pansies and chamomile
To ease the pain I want to forget.*

Chorus:

*Plant me a garden to heal the soul,
A garden of peace and tranquillity,
Soothed with the scent of lavender
And the heavenly blue of chicory.*

Chorus:

known colour although others like pink, mauve and even white are available.

Bergamot, unlike most other cottage herbs has its origins in America and was used as a beverage during the time of the Boston Tea Party when British supplies were being boycotted. Today its aroma is probably known to millions — it helps give popular Earl Grey tea its distinctive flavour. Both the flowers and leaves contain scent but the latter are more strongly perfumed. It is a delicate rather spicy orange scent, supposedly reminiscent of the Bergamot orange after which it is named. Both the leaves and flowers can be successfully dried, or the leaves used fresh. Either way they make an excellent tea. You can also add a pinch of the dried leaves or 1-2 dried flower heads to your normal pot of tea for a special treat. And one which I've never tried but I believe is quite 'moreish' is the addition of bruised leaves to a brandy and dry or gin and tonic.

The tea you make from bergamot is not only delicious but contains medicinal properties as well. It is an excellent remedy for sore throats and minor chest complaints and contains soothing, sleep inducing properties. Added to warm milk with the addition of a little honey, it makes a wonderful nightcap. If there are any leaves left on your bush you may like to use them to brighten up salads, fruit salads or summer drinks, or they may be added to pork whilst cooking for a completely different flavour. Finally, any left over leaves or flower tops can be put aside for pot pourri.

Bergamot can be grown from seed, cuttings or root division. It does best in light moist soil with morning sun — protection from fierce sun may be needed.

CHAMOMILE

Chamomile is one of the best known of the cottage garden herbs yet many people don't realise there is more than one variety to choose from. In fact identification may be tricky for the beginner because even herb books often swap the names about. The matting variety is *Anthemis nobilis* but often referred to as English or Roman chamomile, the variety commonly used for medicinal purposes is *Matricaria chamomilla*, but generally called either German or 'true' chamomile and the most significant of the minor varieties is *Anthemis tinctoria*, which can be used for dyeing to produce a beautiful yellow colour.

Anthemis nobilis is a perennial and can be grown in high rainfall areas as a lawn or ground cover between pavement stones. In former times it was a favourite matting plant for garden seats. The plant has delicate almost spider like leaves and double white daisies with a prominent centre. Both give off a delicate apple like fragrance when crushed or walked upon. Plants can be propagated by layering or root division and like a well drained soil and sunny position. Being a European plant they need plenty of water during our hot, dry summers. Flower heads can be cut and dried and used as a rinse for blonde hair.

Matricaria chamomilla is an annual, grows up to 30 cm in height and resembles slightly the herb feverfew, which is a chrysanthemum. It is an erect looking bushy plant that becomes covered in daisy flowers in late summer. A unique feature of the flowers is that they have fifteen white ray-florets and the yellow conical centre is hollow if split open. The flowers should be harvested when fully open in dry sunny weather, and quickly dried. A tea is made using two teaspoons of flowers per cup of boiling water and allowed to stand for 10 minutes. Chamomile tea aids the digestion and is helpful with intestinal pain, can be combined with peppermint leaves for upset stomachs or combined with sage and used as a gargle for inflamed gums or throat. It is ideal for tired fractious children and may even be given to babies, a weak teaspoonful being adequate. This same tea (cooled) can be used on seedlings to prevent damping-off, and the whole plant was regarded by early gardeners as having health giving vibrations and planted beside ailing shrubs or vegetables. Being an annual it is grown from seed in spring.

Anthemis tinctoria is the variety spinners may be interested in although it is such a pretty plant it would be an asset in any garden. A rockery plant, it has stunning bright yellow daisies in summer. For dyeing, collect 500 g (1 lb) flowerheads, cover with cold water and simmer one hour. Mordant your wool with 125 g (4 oz) alum and 60 g (2 oz) cream of tartar, then add wool to the dye pot and simmer another hour. Gives a bright yellow colour.

HYSSOP — *Hyssopus officinalis*

'There is the very essence of the old world garden in this ever-green plant, beloved by bees and pervading the air with its peculiar exhilarating aroma.' A native of the mountain regions of southern Europe and western Asia, hyssop is a plant of great historical significance, references to it going as far back as the Bible.

A perennial, it is a compact shrub growing to around 60 cm in height. Leaves are dark, glossy green coloured with

narrow pointed shape, while the small flowers appear in spikes at the end of stems. Varieties may be blue, pink or white. The plant gives off a pleasant camphor-mint like aroma when brushed against although it is slightly bitter when tasted. The vivid colours of the flowers attract bees and many old timers swear it acts as a decoy to the cabbage butterfly.

Although the taste of hyssop leaves is unusual it is not unpleasant and young leaves can be used in salads, soups stews and with meat. It was a great favourite in early times as it was believed the addition of a few chopped leaves would help 'cut the fat' in meat and fish dishes. On the medicinal side it has long been regarded as a natural disinfectant and a strong tea could probably be used today to replace those nasty artificial toilet fresheners. A tea made from 15 g (½ oz) leaves to 600 ml (1 pt) of boiling water, then stood for 15 minutes was used for nose, throat and lung congestion and by those suffering from rheumatism. A hot poultice made from crushed leaves was a popular old remedy for a black eye.

Although a perennial and frequently grown from cuttings, hyssop will grow true from seed. A hardy plant, it will do best in a light soil and sunny position. Seed can be sown in the spring and cuttings can be taken after flowering in autumn, or in springtime.

COTTON LAVENDER

This is not a true lavender and despite extensive reading I haven't been able to find out how it came by this common name. There are several cotton lavenders available with all but one species bearing a strong resemblance to each other. *Santolina chamaecyparissus* is the most common variety and is a grey fine leaved bush growing to a height of 30 cm. The leaves have a fluffy rather cotton like appearance. If you can obtain several plants they can be encouraged into a low hedge which looks absolutely stunning in late summer when covered in a multitude of small golden flower balls.

A perennial, *S. chamaecyparissus* is best grown from cuttings taken after flowering or in the spring. It's a very hardy plant and has always done well even when grown on poor soil in full sun. Wherever grown they do require good drainage. Other varieties include *S. pectinata* which grows to 60 cm and *S. virens* with deeper green leaves and creamy yellow flowers.

Traditionally cotton lavender was used by people from southern Europe and the Mediterranean region in the belief that it helped absorb fat when eating pork. A recipe for an excellent marinade for pork contains 1 ½ cups of grated onion, 3 crushed garlic cloves, juice and pulp of a lemon and an orange, and several sprigs of chopped santolina. The pork was marinated in this for 5 hours, and then it was scraped off the meat. Pan roast the pork until tender, and make a gravy from meat juices and the last of the marinade.

The most well known use for cotton lavender is a moth repellent, either in the form of dried sprigs placed between linen or clothing or combined with other known repellent herbs like wormwood, lads love, lavender, tansy and cloves. Such a mixture can have orris root powder added to preserve it. Place in sachets in drawers and amongst books, furs and clothes.

We will continue this fascinating glimpse of cottage garden herbs next issue with information on bee balm, some of the lesser known mints and lavenders, and varieties of the *Artemisia* family. Remember that GR 60 and 61 listed sources for obtaining seeds and plants.

Starting off with Bees

by Brian Brett, Londonderry, NSW.

Why keep bees? The response could well be, 'Why not?' In return for relatively little effort on the part of the beekeeper, bees will supply him with the finest natural sweetener and health food and dramatically improve the yields of his fruit trees, vegetable garden and pastures through pollination. They are tireless workers on his behalf and his investment will bring him substantial benefits in addition to those already mentioned. Caring for his bees brings him close to nature and he can find happiness and contentment in just watching them come and go at the hive entrances, bringing their loads of nectar and pollen from the woods and fields. Every small area farmer, organic gardener or nature lover should consider keeping a few hives of bees. However, there are a few things to think over before you rush out to become a beekeeper.

Things to Consider

Firstly, bees sting and beekeepers get stung! Getting stung is all in the day's work for most beekeepers and they think little of it. If the sting is scratched out immediately there should be no serious consequences. Wearing proper protective clothing will reduce the chances of getting stung to almost zero but the possibility remains. Some people are allergic to bee venom and if you are one of these unfortunates, forget about keeping bees! Try worm farming instead.

Secondly, equipment is expensive. The cost of material for a basic hive consisting of bottom board, single brood chamber, frames and wax foundation plus inner and outer covers will be of the order of \$30, including wood preservative and paint, and you must then supply the labour for assembly. Material for a honey super (essential if you wish for honey, in any significant quantity) could cost an additional \$20. Add smoker, veil and hive tool to these and your total outlay will not leave much change from \$100; and you still have no bees! O.K. you say, I'll build my own hive and save or, better still I'll use a simple box, which costs nothing. But beware! Keeping bees in a hive without movable frames is illegal because you cannot inspect individual combs for disease and you could be liable for a heavy fine. Also, it is impossible to remove honey from a box hive without destroying the combs and probably the bees as well. Building a standard hive yourself is not difficult if you are handy with tools but the inside dimensions must be precise. The modern hive is based on the principle of the 'bee space', the minimum space (6 mm) through which a bee can crawl, otherwise the bees will fill the gaps between frames and walls with comb or glue everything together with propolis. Either way it will be difficult, if not impossible, to remove the frames without damaging the combs. So my advice is, if you must make your own, borrow a standard hive and copy it, thus avoiding what could be expensive mistakes. It is scarcely worthwhile to make your own frames as the component shapes are complicated and difficult to produce without specialised machinery. Mass-produced frames are relatively cheap and superior to the home-made variety. The same is true for wax foundation.

Choosing Your Hive

Then comes the question 'What type of hive shall I buy or make?' The standard hive in Australia is the Langstroth, which comes in 8 or 10 frame size (apart from some larger sizes used for special purposes, which need not concern us here). Most commercial beekeepers, except those in Victoria, use the 10 frame hive but, in my view, the weight of a 10 frame super full of honey is beyond the strength of the average person to handle. (A full super will weigh 35 kg or more.) Why kill yourself? No wonder that 'beekeeper's back' is the chief occupational hazard of the profession. It would be preferable to choose the 8 frame hive with possibly shallow depth honey supers to match. This way, handling a honey crop will be a pleasure, not a trial of strength. Whichever size is chosen, however, stick to it! Do not mix sizes as equipment components then become non-interchangeable, which is a distinct disadvantage if you eventually own more than half a dozen hives.

Second-hand hives with bees are frequently advertised for sale but there are some risks involved in starting out this way. The hives could be harbouring disease which may or may not be evident, as it is possible to temporarily mask the symptoms by dosing with drugs. They could be stolen property (beehive theft is becoming increasingly common as the value of bees and honey increases), so ownership should be checked by referring the registration number stamped on the hives to the Apiaries Branch of the State Department of Agriculture. (All beehives are required by law to be registered and stamped with their registration number). The hives could be home-made and difficult to re-sell or the wood could be unsound (check for dry rot, particularly at the corners of boxes) and therefore worthless. It is essential that an experienced beekeeper examine each hive thoroughly for you before you decide to buy. Hives should be of sound, standard construction and well maintained, with frames and combs in good condition with no signs of disease. Combs should show a good brood pattern with at least three frames of sealed and unsealed brood, ample honey and pollen, a laying queen and all combs covered with bees. If the price is right this could be a good way to get started at the least cost.

Now for the Bees

If you have bought a hive or hives as a going concern, then you have your bees already. If you have bought an empty hive or assembled or built your own, your best bet is to buy a nucleus colony from a reputable beekeeper and transfer it to your own hive. This is a simple operation (the beekeeper who sells you the nucleus will be happy to explain the procedure). It is perhaps the most expensive way but will give the best assurance of success as you will get a young, laying queen and healthy, well established bees on three or four frames of disease-free comb. You can take your hive to the beekeeper and get him to install the bees or, if this is not possible, they can be sent by rail or road in a light-weight shipping box.

Other, cheaper ways to get bees are by capturing a swarm (there are usually plenty about in spring or early summer) or by tracking down a bee tree. Although capturing a swarm is relatively easy, getting the bees out of their home in a hollow tree and into your hive could present some problems! Either way, you can never be sure of what you are getting and the bees could be carrying disease. Swarms, if they are large enough to be of any use, are usually prime or first swarms headed by an old queen and it is good policy to re-queen the colony as soon as possible after they are settled in your hive. (A new queen will cost from \$6 to \$8 delivered by mail). Small, secondary swarms are headed by virgin queens and it may be necessary to combine two or more of these swarms as they often do not survive on their own. There is great satisfaction to be had from hiving a swarm and the bees cost nothing. Sometimes you will be offered payment to remove them! If possible, get an experienced beekeeper to help you if it is your first experience of swarm collecting. Always put the swarm into a hive containing only frames of plain wax foundation, not drawn comb. Some beekeepers suggest that a frame or two of unsealed brood should be included to attract the swarm into the hive but my advice is, use plain foundation only. The reason is that the bees in the swarm are already primed to build comb (that is what they would have to do in nature if left to themselves) and they will go right to work to draw out the foundation in all frames. If drawn comb with sealed brood is present, the queen will lay eggs in the cells and the bees will concentrate on these combs and neglect the foundation. The colony will thus require more time to become fully established. Also there is the danger that old comb could harbour disease. It always pays to start clean.

If you buy a nucleus colony or re-queen a swarm, there is usually a choice between Italian, Carniolan or Caucasian races of bees. Each has slightly different characteristics and one of them may be better suited to your local climate or conditions. It may be simply a matter of personal preference for dark or light coloured bees (Italians are lighter in colour, generally yellow; Carniolans and Caucasians black or grey). Check with the supplier or a local beekeeper for their recommendation.

What About Honey?

A question frequently asked by prospective beekeepers is 'How much honey will I get?' The answer is 'Other things being equal, the amount will depend on the nectar available'. No beekeeper, however expert, can produce honey without a nectar source. Bees will fly two or three kilometres from the hive to collect nectar, pollen and water but it is much better if all these are near at hand. Make sure that a source of water is available and that suitable nectar and pollen-yielding flora are present in your area in sufficient quantity for at least part of the year. As a general guide, during an average season a basic hive consisting of one brood chamber only with no honey super could be expected to produce two or three frames of surplus honey, that is, about six to nine kilograms of comb honey, not enough to be worthwhile. With a full depth honey super or equivalent in shallow depth supers, the yield could be of the order of 20-30 kg of liquid honey, assuming that the hive remains in the same location throughout the year. In a good season this amount could be doubled; in a bad season

there could be no surplus at all and perhaps not enough for the bees to survive the winter. If this happens, supplementary feeding with sugar syrup is going to be necessary. The full honey-gathering potential of a colony of bees cannot be realised from a fixed location. Most commercial beekeepers in Australia migrate their hives, that is, they move them to the best available sources of nectar and pollen as the season advances, sometimes for distances of hundreds of kilometres. The hives typically could be moved four or five times during the year. In this way the bees are able to produce 100 kg or more of surplus honey per hive but this type of operation is beyond the scope of the novice, who usually must be content with more modest results.

Apart from the availability of nectar and pollen, which determines the amount and quality of honey and young bees that will be produced, the most important factor in the productivity of a colony of bees is the queen. Although a queen may have a useful life of three years or more, her egg-laying ability decreases with age. It is amazing to observe the difference in colony activity following the replacement of the old queen with a young, vigorous one. For this reason many beekeepers recommend that a colony should be re-queened every year. Although this may be a sound policy there is some evidence to suggest that a queen in her second year performs better than in her first. It could therefore be better to re-queen your hives after the second year, either in the autumn or in the spring. If the queen is allowed to continue beyond her second year, the likelihood that the bees themselves will replace her increases, a procedure known as superseding. This is seldom desirable as self-raised queens are often of inferior quality, but it frequently happens without the beekeeper being aware that a change of queens has occurred. It pays to prevent superseding by replacing the queen in good time.

Brian Brett will continue his advice for beginner beekeepers in the next issue, where he will suggest an optimum size for an apiary and present ways of making beekeeping more efficient and enjoyable.

HOMES THAT RESIST FIRE

A fire resistant timber house is open for display at Cockatoo, Victoria. It has been designed to prevent windblown burning material sticking to it. Victoria's then Housing Minister, Mr Wilkes, said when opening the house that it was one of three display homes to be built to promote innovative bushfire resistant designs. The first was opened at Anglesea in February and the third, at Macedon, in late 1985. The houses were chosen through the Boral Bushfire Resistant Housing Design Competition. Mr. Wilkes said the design included simple but efficient fire resistant features such as box gutters and fire shutters. It was designed by architect Bruce Douglas.

The three award-winning houses had different fire resistant features. The Anglesea house had metal screens, a concrete roof, fire refuge area and paved external surrounds which reduced the entry of heat, smoke, sparks and fumes to the minimum. The Macedon house would also include low-energy features such as middle brick construction, landscaping and non-combustible roof.

Reprinted from *Weekly Times*, August 28, 1985.

DO IT YOURSELF CONVEYANCING

by J Thomas, Railton, Tas.

When purchasing a property — whether it be land only, or house and land — legal expenses can be a large 'hidden extra' which boosts the overall price. Most people shy away from doing their own conveyancing as they feel that only by using expert (and expensive) legal representation can they rest assured that they will not be making a costly mistake. This is not so. The truth is that most of the actual conveyancing work, and often the settlement itself, is usually done by the solicitor's secretary. By following these easy step-by-step instructions, you can do your own conveyancing and so save yourself hundreds of dollars. The stamp duty, registration and search fees are your only extras, but these would have been paid by you anyway, on top of the legal fees.

I did our own conveyancing and, although nervous and unsure at first, I found the process to be so simple and straightforward that I was left wondering how solicitors can justify the huge fees they charge. Be prepared for raised eyebrows and put downs by your lending institution's representative or the vendor's solicitor when you inform them of your plans to do your own conveyancing. Be confident and assertive; you CAN do it!

Preliminaries

(1) Notify the vendor's solicitor of your plans, and ask him to send you a copy of the Certificate of Title. He will also send you two copies of the contract of sale and will ask you to sign both and return them along with the deposit. He will then get his client(s) to sign them both and will return one copy to you to keep.

(2) Once you have the copy of the Certificate of Title, write to the Recorder of Titles (in your capital city) quoting volume and folio numbers and the full name(s) of the present owner(s).

(a) Ask for a search of title (enclose a money order for the search fee — in Tasmania it is \$2).

(b) Lodge a priority notice form (available from your local court offices).

(c) Ask for the amount of the registration fee — this is dependent on purchase price.

(3) Write to the electricity commission, quoting information as in (2) and ask if there is a way-leave agreement affecting said land.

(4) Write to the Valuation Division, Lands Department, in your capital city, asking for land tax search (this, of course is applicable only if your state has a land tax).

(5) Visit your local council or shire offices and ask for a rates search, also ask if there are any council plans which could affect said land. There may be a search fee applicable. Again you will have to quote information as in (2).

(6) Obtain from your local court offices Memorandum of Transfer form(s). I asked for spares as my typing is not the best, and this form must have no mistakes.

Forward this to the vendor's solicitor when you have completed steps (1)-(5) and are satisfied that all is well i.e. that you are aware of any mortgage on the title and that it is in

the correct name(s). He will then have it signed by the vendor.
(7) Obtain one Lands Titles and Registry of Deeds form (from court office)

Settlement

When all of the above is complete, you can contact the vendor's solicitor and your lending institution, if you are borrowing money, and arrange a mutually agreeable time and date for settlement. The vendor's solicitor will then forward to you a statement of monies owing. This will include the purchase price, less deposit, and a pro-rata adjustment of rates and/or land taxes. He will ask that you bring the amount in the form of a bank cheque. If the vendor has a mortgage on the property (this will show up in the title search) then this will be paid out at settlement.

The Transfer

If you have taken out a mortgage on the land, your bank's representative will take care of the transfer for you. If not, here's what you have to do.

(1) Have stamp duty assessed, then pay by cheque to the Stamp Duties Office in your capital city.

(2) Send to the Titles Office.

(a) Certificate of Title, given to you at settlement.

(b) The Memorandum of Transfer, this will also be given to you at settlement.

(c) Lands Titles and Registry of Deeds lodgement form, along with registration fee.

(d) The contract of sale, this is for assessment of duty.

(e) Notice of Sale form, this will be handed to you at settlement.

The Certificate of Title will be sent to you in due course, with you as the new owner noted on the title.

There! It's all done and it wasn't so hard, was it? I stocked our land with weaner calves with the money I saved. As I watch them grow I can't help but think 'I did it myself'. A good feeling.

Handy Hint

Before starting painting, protect your glasses from specks of paint by smoothing a small piece of cling-film over the lenses.

NOT JUST A BUSINESS FOR SALE

Here's an opportunity for someone who would like to enjoy the enormous benefits of living on the far north coast of NSW & still make money. **Granny's Homemade Icecream** returns \$14,000 p.a. for 3 days work a week and could make a lot more with a little effort. The asking price is

\$29,000 + stock

For further information write to: The Advertiser, Blindmouth Rd, Main Arm, Mullumbimby 2482.
Phone 066 845404

HOME HYDRO-ELECTRICITY

four years later

by Don Lawie, Babinda, Qld.

Our small hydro-electric scheme was commissioned into service at Easter 1982, and I reported on its installation and operation in GR 35. The unit has been functioning for several years now and it seems an appropriate time to recall the problems and successes that occurred over that period.

At the time of writing — early May — the machine has just notched up its hundredth day of operation for the year. Performance is currently faultless, and power production is stable at around 245 volts, 50-52 Hz, and with 3.3 kilowatt output. If only it had always run like that!

Our problems started, somewhat ironically, just as my original article was being printed. My initial stream flow measurements in our creek seem to have been over optimistic as far as dry season flow goes. We have been having unusually prolonged dry periods during the later part of each year, and the creek flow diminishes so much that there is insufficient water to run the turbine.

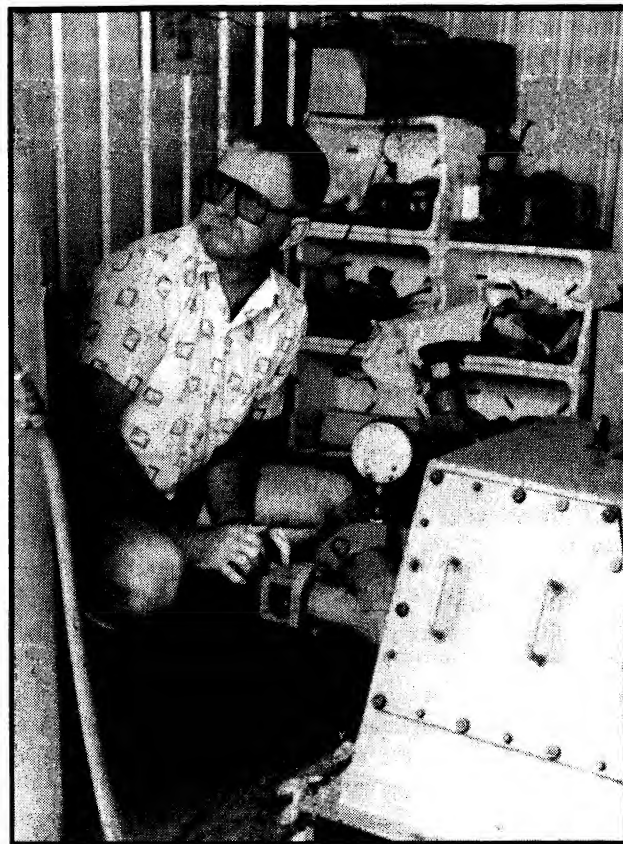
Our mountain, being composed mainly of ancient granite, retains very little water, and the spring fed creek relies on frequent rainfall to keep it flowing well. This is no problem during the wet season — we live in Australia's wettest area — but we sometimes go for several weeks without significant rainfall during the August-December 'dry'. Once the creek flow has fallen it takes several days of rain to replenish the springs, and so our occasional dry season rain is of no use as far as power production goes.

The creek never dries up, and there is always plenty of water for domestic use, it is just that we need lots of water to make power. Six litres of water per second may not sound much, but that's forty-five plastic buckets every minute. I suppose that I could dam the creek and take the entire dry season flow, but that would have a disastrous effect on the life forms that depend on the flowing water for their existence.

When the turbine was installed, I retained the old diesel power unit in case of dry weather, and it proved to be a wise precaution. We struck our first dry spell towards the end of 1982, and the turbine was not operated for a period of about two months. The wet season started as usual in early 1983, and we started up the turbine with great hopes of a long run of power, but were soon alarmed by overheating in the alternator, and a nasty smell of burning.

After a lot of detective work, it was established that the main stator in the alternator had burnt out. This was a major problem, which entailed complete dismantling of the alternator, and rewinding of the main stator by a motor rewind specialist. To achieve that, I asked a fitter friend to come out and show me how to break the coupling between alternator and turbine and help me load the alternator into my van. I took it to Innisfail — 45 km away — for a rewind that cost over \$500.

All went well after re-installation. We had a good wet season in 1983, followed by useful rain in the dry, and the



Don adjusting the spear valve inlet on the turbine.

turbine was only out of commission due to water for three weeks in October of that year.

A particularly valuable feature of the design of my turbine is that the water is put onto the Pelton wheel by a single jet which is controlled by an adjustable spear valve. When plenty of water is available the spear can be opened up to allow ample power production, and as creek flow falls the jet is adjusted via the spear valve. Thus pressure is maintained whilst power production falls in line with water flow until a non productive level is reached.

The dry season of 1984 was again a prolonged one, and the turbine was out of production for over three months. The main stator burnt out again, shortly after start up, requiring another rewind job. This time I was able to dismantle the alternator myself and take the main casing only down to the rewinder so that the job cost a reasonable \$350. I made careful notes as I went, so that I could put it back together, and had one of those moments of truth as I put the water on the wheel and the alternator worked again.

The two main stator burnouts were totally unnecessary. They were caused by a build-up of moisture in the windings of the alternator over the period of months in which it was not used. We have a humid atmosphere even in the dry season,

and the alternator was housed in an enclosed shed which contributed to the moisture build-up. Before re-starting the turbine after the dry season, I should have checked the moisture content of the windings. This can be done by measuring the insulation resistance of the main stator and exciter stator windings, and comparing these with the maximum allowable levels printed in the alternator handbook. Measurement is done by using an electrician's meter called a megger connected between the stator leads and the earth rod. If moisture has built up in the stator windings it is indicated by the megger, which puts a high voltage current through the windings. Moisture can be reduced by heat. High wattage light bulbs can be placed inside the alternator, or a domestic bar heater can be placed alongside for a few hours, and the resistances remeasured until they fall to an acceptable level.

We had an even longer dry season break in late 1985. When the wet season was imminent, I borrowed a megger, did some heating as above, and was satisfied that all would be well when the rain came this year. Why didn't I do it after the two previous dry seasons? The short answer is that I simply didn't understand the problem, and when I did, I didn't realise that it could be so easily solved.

The Modra handbook says quite plainly that if the alternator has been stored the resistances should be checked and the windings dried out if necessary. I didn't know what a megger was, and didn't know where I could get one anyway. If I had one, I wouldn't have known how to use it, and so I had to suffer two major burnouts before I had the sense to seek advice from the chief electrician in the sugar mill where I work. Of course, my problem was as simple as ABC to him, and he has been a source of invaluable advice and help.

The alternator burnouts were only the most spectacular of our problems. The voltage output is controlled by a solid state electronic unit which is part of the alternator — a Static Excitation Unit — or SEU in Modra language. The SEU has a couple of potentiometers on it by which the voltage can be adjusted when the SEU is installed, and once set they don't have to be touched. Over the years of operation I have had about six of these SEU's fail. Cost of a new one was \$210 (at 1985 prices) or \$120 for a factory exchange unit which may or may not work — the last two did not, so it's a pretty expensive gamble.

Several hypotheses have been advanced as to the reason for the continued failure of the SEU's. There may be an element of incompatibility between the SEU and the electronic relays on the governor board (of which more later) resulting in power surges when the relays are switching in the higher dummy loads. Or the exciter stator may be suffering from an intermittent fault, though all measurements I have made show it to be normal. Or there could be some weakness inherent in the SEU itself. I worked through the possible causes and tried solutions to each. Finally, when my umpteenth SEU gave signs of failure last year, I followed advice and installed an entirely different type of voltage regulator, manufactured by the Basler company in the USA. The Basler cost me \$380, ran well for ten days then for no discernible reason it blew itself to bits internally.

The relays on the governor board have also been subject to numerous malfunctions. They again are a solid state unit. Their job is to switch on and off the dummy load units so as to

keep power consumption from the alternator constant. The dummy loads consist of immersion elements plumbed into an old hot water system with a constant flow of cold water through it. The loads are stepped in power consumption from 75 watts through 150, 300, 600, 1200 and 2400 watts, and if one relay stops working the others have to cover the 'gap' and the governor tends to get a bit confused — I hope that the reader is not.

A solid state relay such as this should be good for millions of switching functions and should, theoretically, never wear out. Mine have a life of about three months. Causes are again only theoretical. Our tropical high temperature may be causing failure from overheating. I made heat sinks for them, with no effect. There may be a voltage spike coming from the SEU on the alternator, which overexcites the relay and causes internal failure. Who knows? I only know that their price has gone from \$30 to \$50 and their reliability has lessened as much as their price has increased.

The earliest problem I noticed with my hydro-electric power was that we were no longer able to listen to the radio. Excessive static was generated by the alternator. This problem was cured very easily by the installation of a radio suppression unit in the alternator, between the main stator and the SEU. I have over the last few months come to suspect that the Radio Suppression Unit (RSU) may have been my problem all along. When I was doing my megger testing at the end of the last dry season I was very careful to disconnect all the electronic units in the alternator before applying the megger. This is because the high voltage currents from the megger would blow any electronic components such as the SEU and the diodes in the rectifier. I forgot about the RSU however, and it became a victim of the megger. The RSU cost \$60 in 1982, and being unwilling to spend any more money at the time it blew I disconnected it and ran the alternator without RSU, as was originally supplied. We can't listen to the radio anymore, but I have had no problems with either governor or alternator since, and only time will tell whether my RSU theory has any validity.

The only other action I have taken is to shut down the turbine each night at bedtime. Originally this was because of heavy rain each night which caused bits of gravel and plant material to come down the pipeline and jam in the spear valve. I have continued the nightly shutdown in the hope that the time off each night would help prevent overheating of components or fatigue of switching gear.

Whatever the reason we have had 100 days of power since the RSU was disconnected and nightly shutdowns commenced, and that is a record for the life of the machine.

The above has concentrated on the electrical problems associated with the alternator and governor. There have been others — faulty voltmeter that cost me a fortune in light bulbs and household appliances, a couple of burnt out dummy load elements and hot water system element, but these have been simple cause and effect problems. The more difficult faults have been expensive, time consuming and frustrating.

I must make mention of the after sales service that has been freely given to me by Mr Jon Lemon of Tamar Designs, the suppliers of the turbine, and Mr David Winslade, the managing director of the firm which manufactures Modra alternators. Mr Winslade is in Perth, Mr Lemon in Tasmania

and I am in Far North Queensland, so troubleshooting at these distances has been of a very difficult nature. Both men have been extremely patient with my problems, and have never failed to supply advice and suggestions for improvement.

The water supply has been a saga of its own, with washed out intakes and broken pipes. The most spectacular damage came with the visit of Cyclone Winifred on Feb 1, 1986. The winds caused havoc in the scrub, my line suffered four massive tree falls and several near misses, and took three days' very hard work to repair.

When I wrote to 'GR' in 1982 about my newly installed hydro scheme, I was still filled by the wonder of power produced from falling water, and had no idea of the problems that still lay ahead. Now, several years later, I know that I have often felt that I should have spent the money on getting grid power installed. And yet, every night when I shut the turbine down, and every morning when Pauline starts it up, I get that little glow of satisfaction that comes from having taken one more step along the road to self-sufficiency.

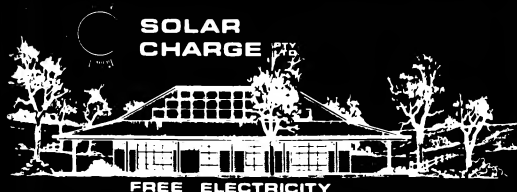


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TEARS IN THE MORTAR

by Marly Wright, Maryborough, Vic.

'The journey seemed endless, trees were still on fire, animals dead and dying everywhere, houses just black smoking shells, others untouched. We approached the turn to our house, feeling the helplessness that pervaded everything and everyone . . . there was nothing there! The caravan had melted down onto the ground leaving a blackened chassis as a reminder of where we used to live. Our clothing, bedding, house furniture, everything that had once been so familiar just wasn't there any more.'

This is an excerpt from an article Marly wrote for us for issue No. 53, describing the horror of being caught in a bushfire and the overwhelming sense of loss and futility that faces people who suddenly find themselves with no tangible links to their past. Marly is a plucky individual and mentioned in that article how she solved the family's bedding problem with her new do-it-yourself carpentry book. She also wrote of the mudbrick house she was going to build and it's with pleasure we bring you this article — Tears in the Mortar.

Building my house wasn't as easy as it looked or sounded in the books I have read but the experience and satisfaction has been well worth the effort. It would be fair to say that during the last two years our lives have been ruled by the building project, and that the house has been built with laughter and tears, love and hate. The many problems that cropped up have kept me occupied and made our bushfire losses of 1984 easier to accept.

There have been many tears of angry frustration cried into the mortar courses. The house building took me away from the family and they in turn learned to cope independantly, leaving me feeling totally lost and alone at times. Then something from deep inside would take over and I would look at my half built house and feel very ashamed of myself and my defeatest attitude. In a burst of energy I'd throw myself into mixing up a wheelbarrow full of mud mortar and work on another part of the house while I chewed over both my emotional and practical problems.

I had a lot of fun placing 2 litre bottles in the walls and did much experimenting with them at different heights and angles. I had originally had leadlight windows in mind but the bottles were an inexpensive, practical substitute. After that I placed something in each wall, including the internal walls. In the latter I created two flowers made out of green bottles with cookie jar centres which glow into the living room area when the shower room lights are turned on. For a fixed window I recycled the glass from a circular coffee table and it took on a flower like shape too. We had salvaged a few personal possessions out of the burnt wreckage of our caravans and these were laid into the mortar courses too.

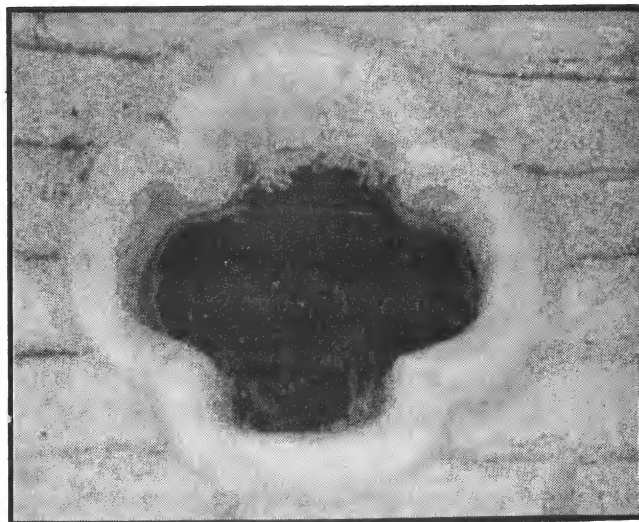
Throughout building the house volunteers came and went, giving us their friendship and help and providing us with very special memories forever. Neighbours lent us their tools for so long I'm sure they must have forgotten ever owning them. It was people like these that gave me the strength and impetus to keep going.

My daughters got to the point where they hated the sight of mudbricks and took over keeping house so I could get on with the building. Then suddenly — or should I say finally — it was time to switch over the power and move our beds into the house. The only problem was that the flat we'd been living in had built-in furniture and because of the suddenness of our move there had not been time to build anything in the house. Of course chaos reigned and with everything in boxes we didn't know where anything was to be found.



Above: Marly at work mudbrick making.

Below: Recycled glass from a circular coffee table used to create a fixed window, its shape highlighted with moulded mud.



Although it is not finished yet it certainly feels good to be actually living in my homemade house. We all have room to breathe and visitors don't send me into a panic anymore. Eventually I will get my own room but for the moment it's being used as a workshop and I sleep in the kitchen.

To anyone thinking of building their house out of mudbrick, believe me, it's well worth the effort. What is really essential is that you find yourself an electrician and a plumber with unlimited patience and versatility because there will be a number of changes of mind as your house takes shape. Read as many books about mudbrick building as possible so you know what you're talking about. It helps especially when you have to get your ideas across to the building inspector — he won't hassle you if your ideas are sound. And take no notice of people who say you'll never make it! I was told many times to 'get off my cloud and come down to reality', but I happen to like it up there. It's a place where dreams do come true. Finally, if finance is a problem and you are a Victorian ask about the Ministry of Housing's Self Build Scheme. My area supervisor was terrific and only a phone call away if I needed help. Other states must have a similar set up.

To everyone who helped me, and there were many, I say thank you, we will remember you always. A house is such a permanent reminder of this fruitful time. My friends from New Zealand deserve a special mention (they came over to help regardless of the cost and distance) as does *Grass Roots*, which made many of these friendships possible. We need more magazines like it.

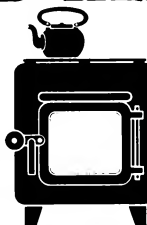
Marly Wright's article *The Bushfire* was in GR 53, p. 19.



Front view of our house. You can just see several of the wine flagon panels that have been built into the front door surround.

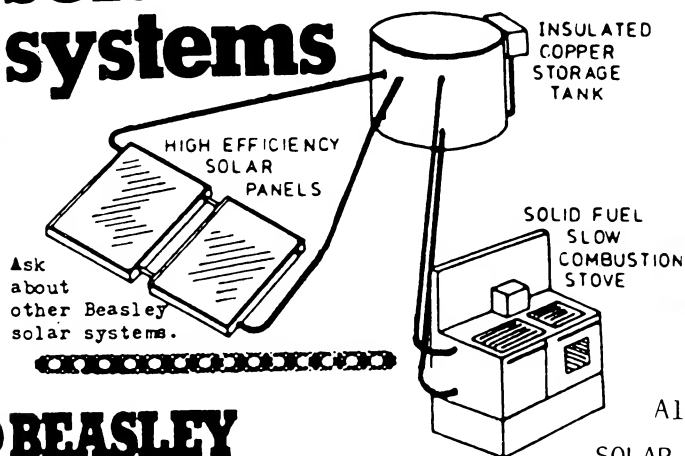
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THE GREAT TAKE-OVER

making a flower garden where fairies fear to tread by befriending the irrepressible self-seeders

By Lolo Houbein, Bridgewater, SA.

If you are still deep into the vegie patch phase, to the exclusion of all else, don't read on. If you are still in the experimental stage, trying to train tropical beans to swell in frosty valleys, or aiming for a year's grain supply from a South American weed that keeps someone on the other side of the continent in bread, then don't read on. And if your gardening ideals have been adjusted and undermined by your insistence that your domesticated animals shall have the freedom of the place, this is not for you. Or, if you sit on disgustingly fertile soil where a hoe handle left in the ground has sprouted by the next moon, then you might as well turn the page and leave this for the honestly despairing . . .

However, if you bought your acre of paradise while looking at the view, this may be for you. And if, despite your belatedly discovered soil problems, you have settled for growing a few dozen hardy vegetables, aided by a dozen rampant salad greens and abetted by half a dozen types of berries which crop in the second year no matter what the circumstances . . . and if you have come to a gentlewoman's agreement with your feathered flock, pigs, goats and other opportunists who are ruling your life . . . and if you have realized that mankind ought not to live by vegetables alone . . . then, by all means, read on.

When I was learning English I didn't understand the difference between ground and soil. They were interchangeable to me, I would stick a cutting into the ground, water it, and watch it die. This article has been written for those whose soil only deserves the name ground, who grow their sensible vegetables by endless labour to compost every twig and scrap of organic matter, and who sigh: 'Ah, if only I had proper soil, I'd grow a few flowers, but you can't expect THEM to survive in THIS!' For it is our cultural understanding that flowers are tender and fragile, while vegetables are coarse and tough. In fact, the reverse is the case more often than not. Growing vegetables is like doing the house work — it keeps coming around and if you don't constantly repair, clean up and organise, the system just runs down.

Not so with flowers — some flowers. It is possible to build up a community of flowering plants as tough as nails, whose fecundity creates a mini climate that is close to self-supporting and needs only half yearly additions of mulch (any mulch) and watering when under stress, and that's far less often than vegetables need (to be watered) to be palatable. In fact, many flowering plants give more and better flowers if they're not overfed and overwatered. So don't stick to geraniums only.

My daughter won't grow geraniums. She carries an indelible memory from childhood years of a straggly border of red geraniums which I tended by words, watering and weeding, but which never managed to show anything but malnutrition and apparent neglect. Like the woman in the bush in Henry Lawson's story, I believed geraniums to be the only flowering plants able to grow in the hardbaked red clay of

the new housing estate. To my daughter geraniums spell poverty, failure and a battle lost.

If a windbreak was needed I would, in a previous spring or autumn, plant a row of acacia or melaleuca bushes to act as 'nurses'. They grow very fast and make a flowering backdrop to the impending miracle you are about to trigger off.

Gardening has been a long learning for me. Many gardeners and garden writers have helped, but encountering the yellow subsoil clay at Middle Hill — elevation 500 m (1600 ft), rainfall 1000 mm (40 in) mainly in winter, summer temperatures in the 30's and 40's — brought geraniums to mind and they were all I planted in the way of flowers for the first few years. Geraniums and pelargoniums. But it was my interest in herbs that revealed to me the virtues of selfseeding plants and if I started a flower garden now in soil that would hurt a dancing fairy's toes, this is what I would do.

I would plan my garden in winter and in August would buy a few bags of topsoil or potting soil, mix it with a few shovels full of gypsum, dolomite and organic fertiliser and have it ready in the shed. This can be done piecemeal by the bucket. During winter I would have put in my order with a seed company selling seeds of herbs and old-fashioned flowers (see GR ads). Then before the soil dries out, in September perhaps, I would pick drills in the ground, 20 cm wide by 20 cm deep (8 x 8 in) and fill these with the prepared soil mix. If you have done all this, you are now ready to sow your self-seeders.

Never sow the whole packet. Keep some seed on hand in case the weather turns unseasonable and try again in October. Water the seeds in and apply a thin mulch of hay or grasscuttings. Give daily handwaterings until seedlings appear, because germinating seeds die if they dry out. Once they have roots, the mulch will cut down watering to a minimum. Protect drills or beds with logs or rocks so that soil and mulch stay in place. Rocks especially preserve moisture near plants. The plants will push up through the mulch. Delay weeding until you can recognise your seedlings. Then place a rock (three is better!) near every plant as a moisture regulator. In the absence of rocks, a small mudbrick will go a long way!

Please realise at this stage that it will take three years for the selfseeders to do their work and for your garden to be ready for the cover of the nation's top garden magazine. Here it seems useful to interrupt with a note on compost. In the less than ideal garden, the compost is also less than ideal, because it is made from prunings deficient in what the soil is deficient in. Forget about descriptions of a chocolate brown, friable product, beloved of all garden experts. Take heart, for anything that is remotely organic can turn into compost if you help it along. A lawnmower helps, but even without one you can pack layers of eucalyptus leaves, prunings, bracken, straw and wild plants of the non-seeding type, water them regularly, turn them occasionally and get compost. You may have to shake out the hardy branches, but underneath is the

black gold — not after two weeks, but certainly after six months; so start now. Add handfuls of lime, some animal manure, any old soil, and urine. If you have shredded the materials with a lawnmower you obtain a compost full of twiggy bits. After spreading and watering the compost settles down and the twigs lie on top as a mulch. It doesn't look like the pictures in gardening ads, but it works!

Some Planting Suggestions

TALL SELFSEEDING PLANTS

amaranth (dark red)
woolly mullein (yellow)
evening primrose (yellow)
shungiku (yellow)
coriander (whitish-pink)
carrots (white)
sweetpeas (pastels)
foxgloves (pastels)
tansy (yellow)
kangaroo apple (purple/orange) yellow

MEDIUM SELFSEEDING PLANTS

honesty (purple and white)
borage (blue)
valerian (white and cerise)
anise (white)
columbines (pastels)
love-in-a-mist (blue)
marigolds (orange)
feverfew (white/yellow)
cornflowers (blue)
larkspur (pastels)

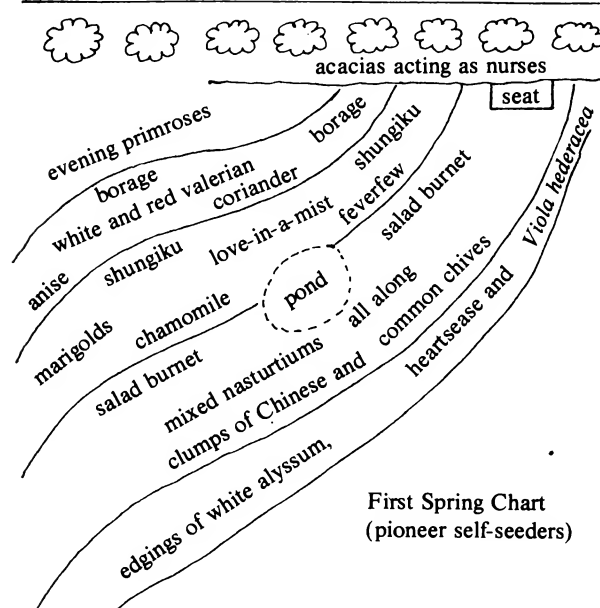
SMALL SELFSEEDING PLANTS

phloxes (various)
chamomiles (yellow-white)
chives (mauve)
chinese chives (white)
nasturtiums (yellow, orange) red, brown etc.
poppies (red)
virginia stock

GROUNDCOVERS

ladies' bedstraw (golden)
heartsease (purple/yellow/white)
viola hederacea (white/purple)
alyssum (white or mauve)

Diagram to follow:



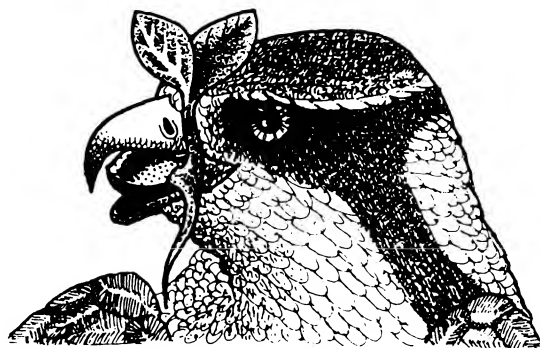
First Spring Chart
(pioneer self-seeders)

GROUNDCOVERS *continued*

polyanthus (lemon)
yarrow (white or mauve)
chriscombe (yellow)

Because of its length we've had to cut Lolo's article in two and will present the second section next issue. There she will discuss more fully the plants she mentions in the above lists, with suggestions on how to achieve your own harmonious arrangement of colour and shape. She will also indicate which plants are useful for dyeing, cooking or medicinal purposes.

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WINTER WOOLCRAFTS — WINTER WOOLCRAFTS

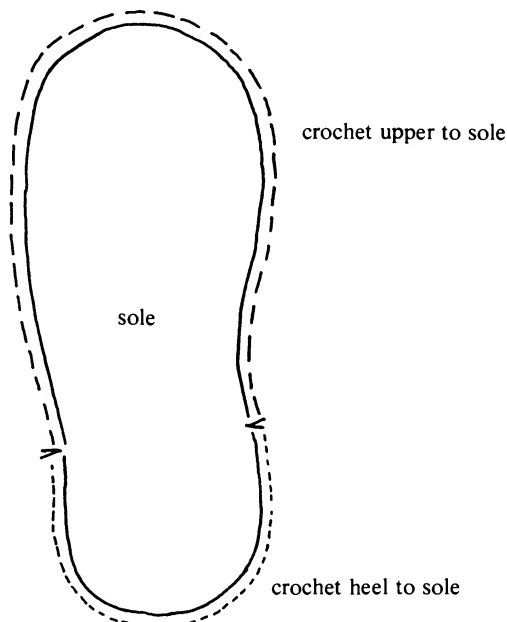
SHEEPSKIN BOOTS OR SLIPPERS

by Kathleen, Melbourne, Vic.

Here is a use for home-tanned sheepskins — alternatively, if you are buying the skins, some well chosen off-cuts will be suitable. These slippers are lovely and warm and just the thing

To make the pattern (thin cardboard is best), draw carefully around the foot keeping the pencil vertical at all times. Cut out four pieces of cardboard from this shape and then two pieces 7.5 cm (3 in) wide and the same length as the sole for the heel. You now have three pieces for each foot. Arrange patterns on skin and draw around them, then cut out with a Stanley knife or very sharp scissors. Punch holes around edges, about 1 cm ($\frac{1}{2}$ in) apart and then crochet three double chain into each hole around all edges. Around the tip (one side of each heel piece) crochet another row of double chain and around the soles and remaining three sides of heel, one row of treble chain.

To crochet together stretch around the toe area to form shape; if your pieces are not large enough, crochet an extra row. The slippers could also be sewn together with glove stitch if preferred — just sew twice into each hole. Because feet come in a variety of shapes and sizes, it is worth making a rough copy out of material scraps to ensure that the slippers will fit the intended owner. You can then adjust the pattern accordingly before cutting out the sheepskin.



USING UP OLD SOCKS

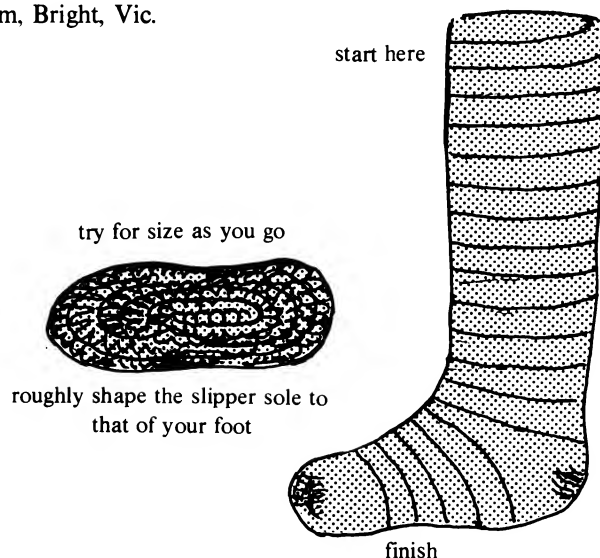
by Angela Sidebottom, Bright, Vic.

Last winter when I was off work with flu I had a giant clean up and in the process discovered a large bag of woollen work socks which had been put aside a year or so back, for mending. I'm neither good at, nor interested in darning, but feel philosophically, that we shouldn't wantonly waste our resources, so was faced with thinking up ways of using them.

I discovered a great way for recycling woollen socks. They were long socks, so I started cutting at the top, going around and around and producing a strip 3.5 cm ($1\frac{1}{2}$ in) wide. I kept the circular cutting going until I reached the heel, which was worn and frayed and definitely not useable. By clever manipulation I was able to keep the strip continuous and so cut on, around and around the foot of the sock until I reached the toe, another sad and sorry sight.

I rolled the strip into a ball and with a large crochet hook commenced to work a sole for my 'slippers'. With the thickness of yarn I was working with, it took no time to finish. I used roughly four old socks to produce a pair of soles. It should be possible to continue crocheting and shape it to form a pair of slippers but it's beyond my ability at the moment. I took the easy way out by sewing the soles of an ankle length pair of woollen socks to the crocheted soles and produced a warm, cosy pair of slippers for myself.

I've become really excited about the projects that can be made and I've started buying old jumpers at op shops with a view to crocheting an oval rag rug for in front of the fire.



UNSHRINKING WOOLLENS

by Joan Rose

Dissolve approximately 85 g Epsom salts in boiling water and leave to cool. Soak the garment in the solution for 30 minutes, remove, squeeze out excess water. Lie flat on a towel and restretch the garment to its correct size and shape. Allow to almost dry and then press under a dry cloth.

MAKING SHEEPSKIN BOOTEES

by Helen Ryan, Perth, WA.

Cut sheepskin to pattern. Using a leather hole punch, punch holes big enough for a 3.5 mm crochet hook. A smaller hook may be used for the first row. It is easier if you trim the wool away from the edge to about 1 cm before punching the holes. A piece of leather placed over the little metal disc on your punch protects it from damage.

Trim sheepskin fleece 1 cm (½ in) from cut edge all around to prevent it catching on the yarn and crochet hook.

To Make

ROW 1 2 Double crochet into each hole all around, starting at the heel.

ROW 2 and 3 Double crochet all around.

ROW 4 Commence shaping the toe — decrease 4 stitches evenly across the toe area, as you double crochet all around.

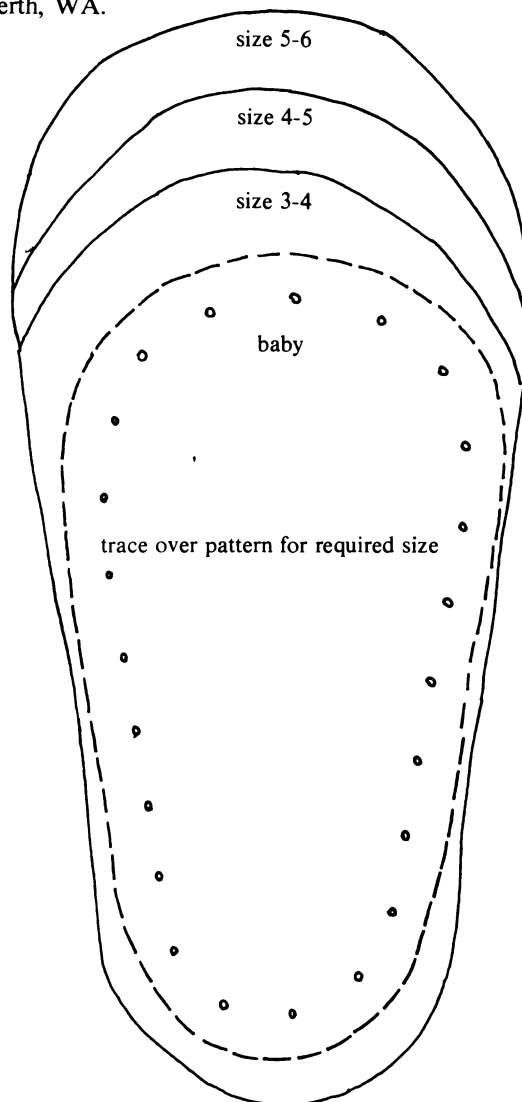
ROW 5 Continue shaping toe by decreasing 3 stitches evenly across the toe area, as you double crochet all around.

ROW 6 Continue shaping toe by decreasing 2 stitches evenly across the toe area, as you double crochet all around.

ROW 7 Continue shaping toe by decreasing 1 stitch evenly across the toe area, as you double crochet all around.

ROW 8 Double crochet catching the centre front with a double crochet (about 4 double crochet — 2 either side of the centre front). The idea being to make an 'ankle' hole large enough to get the foot in, and small enough to keep it in.

ROW 9 Building up the ankle, double crochet around 3 or 4 rows.



Make a drawstring, (crochet a chain) and thread through rows 7, 9, 10.

Reprinted from *The Yarn Spinner*, November 1984, PO Box 171, Claremont 6010.

WASHING WOOLLEN GARMENTS

by Liz Lewis.

Mix up the following to have on hand:


1 large packet Lux Flakes.

60 ml (2 oz) eucalyptus oil

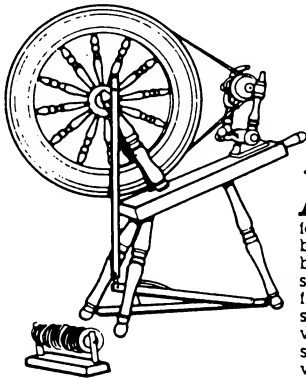
240 ml (8 oz) methylated spirits

Add 4 tablespoonsful to warm water for washing blankets, 1 tbsp for a jumper. No need to rinse this out of the garment.

Reprinted from *SACSOS Newsletter*. August 82. No 29.



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Elizabeth

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WINTER WOOLCRAFTS — WINTER WOOLCRAFTS

Interested in spinning or weaving or other woolcrafts but feel uncertain about how to get started? Or maybe you're already a keen spinner but would like to find more creative ways of knitting up your wool. Regardless of whether you are a beginner or an expert the many woolcraft Guilds throughout Australia will offer you information and encouragement and help you open the doors to an immensely satisfying and worthwhile activity. We have listed some of the major Guilds and the activities they offer but don't forget there are hundreds of country groups so why not contact the state branch and find out the group closest to you.

Handweavers and Spinners Guild of NSW Inc.

We have been a Guild for forty years now and from the beginning there has been a common purpose, a willingness to help fellow weavers and a desire to improve technique. The aim of the Guild is still to bring together people who practise the arts of handweaving, spinning and dyeing and associated crafts such as tapestry, knitting, felting, braiding, bobbinlace and tatting. Not surprisingly our membership is in excess of 600, and scattered throughout Sydney and rural NSW.

An active Guild, we hold a festival every 2 years, a week of concentrated tuition, the Loomcraft school, as well as many year round workshops with overseas and local tutors. We also publish a monthly newsletter and twice yearly journal. Our Guild rooms have a well stocked library, yarnshop, and items of equipment for hire.

Members, guests and interested persons are welcome at all times to attend meetings and workshops. Enquiries to Hazel Meigan (02-604-5738) or Betty Corner (02-654-3431).

Handweavers and Spinners Guild of Victoria

Our aim is to share and advance the arts and skills of handweaving, spinning and allied crafts. We hold monthly meetings and workshop/demonstrations, have an extensive library of books, journals and slide kits and a shop stocking books, craft supplies and equipment.

A monthly newsletter keeps members informed of exhibitions, classes and workshops. Special interest groups (basketry, knitting, dyeing) are also catered for. More information on the Guild and its activities is available (sae please) from us at the Meat Market Craft Centre, 3 Blackwood St, Nth Melbourne 3051, ph: 03-329-6191.

Queensland Spinners, Weavers and Dyers Group Ltd.

The work of our group is extremely varied. Fleece, cotton, silk and synthetic fibres are spun and knitted or woven into garments, household articles or artworks. Often they are naturally or chemically dyed, or the dyes painted or printed onto the fabric.

Our group has been active since 1969 and though most members come from the metropolitan region others are as far away as Cairns and Tasmania. We hold meetings, workshops and classes, participate in community projects, host an open day and are preparing for our third Winter School. We invite members and the public to join us and learn new skills. If you would like to know more about us write enclosing a sae to PO Box 362, Toowong 4066.

Canberra Spinners and Weavers

Our group provides an opportunity for members and visitors to meet and discuss their woolcraft interests, be they enthusiastic hobbyists or professional craftspeople. Topics

covered include spinning, weaving, felting, knitting and crocheting with handspun and vegetable and chemical dyeing. Group projects, workshops and participation days are organised and beginner and advanced classes held.

Members may borrow books from our well stocked library or hire woolcraft equipment — wheels, looms and accessories — and our yarn shop is well stocked and open regularly.

If you're interested in woolcrafts and live in Canberra or surrounding areas why not get in touch with us at PO Box 1452, Canberra 2601.

Handspinners and Weavers Guild of SA Inc.

We celebrate our 25th year in 1988 and look forward to sharing this auspicious occasion with the wider community. Our members are keen and energetic craftspeople, and, as well as running an active central group, we have many enthusiastic and industrious groups sprinkled around the suburbs, the Hills and country areas.

Activities include regular meetings, special occasion days where books, fibres or yarns are on display and sale, exhibitions, a stand at the Royal Show and a number of challenging, stimulating workshops.

We invite interested people to attend our meetings and share our enjoyment of wool and associated crafts. Write to Secretary, PO Box 163. Torrensville 5031.

There are also Guilds in Tasmania and Western Australia.

Handweavers, Spinners and Dyers Guild
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GENERATORS

some cold, hard facts on a hot topic

By Robin and Anne Hughes, St. Arnaud, Vic.

Our article in GR 60 (*Who Needs the SEC?*) led to a number of enquiries about alternative energy systems. This was heartening for us but after a while we began to realise that most people were labouring under the mistaken impression that a generator set was all that was needed to escape the clutches of the dreaded electricity supply authorities.

Life is rarely easy or uncomplicated and power systems are no exception, although some people wonder why we muck around with wind and solar power when 'you can have 240v power at the flick of a generator switch'. It's true — you can have 240v electricity from a generator set but you must also be stone deaf, have no sense of smell, no complaining neighbours, no moral scruples about squandering nonrenewable fuels and be a multimillionaire to boot!

Since few of us are in this happy(?) position, the best we can hope for is to use a generator set as a back up for other alternative power sources. Getting the right one for the job is easier said than done but the following points should underline problems and debunk some common fallacies.

The Good and the Bad

There are two types of generator sets available — the first is the portable type which is usually petrol driven and runs at 3000 rpm (some diesel units are available). The portable petrol type is lightweight, cheap and attractive to people wanting a power supply, but it is designed only to run small appliances, has a very short life, makes lots of noise and has no on-demand facility. It is highly unsuitable for running a house where pumps, lights, refrigeration and heavy electrical items are required. This sort of generator set also gulps fuel in alarming quantities and while it is suitable for campers and tradespeople, do not get talked into acquiring one for a home power unit.

The second type of generator set is the fixed type, presently available only as a diesel unit which runs at 1500 rpm. This sort is known and sold as a 'home lighting plant'. These generator sets are designed to run a household and some have the option of an 'on-demand' facility which means they can be used for lighting and refrigeration (see Geoff Bradshaw's article in GR 60). However, to supply this, the generator will be running, lightly loaded, many hours a day with considerable fuel wastage as a result, and its life will be considerably shortened.

So, while it is possible to run your house solely on a diesel generator set, these factors plus the intrusive noise levels will lead you naturally to other energy sources. For those of you who are still not convinced, the following examples might add some weight to our argument.

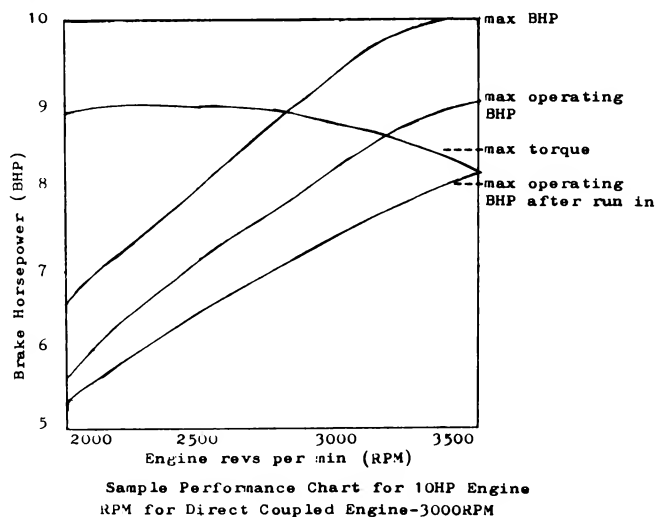
To supply all your household needs with a generator set, it will need to run at least 12 hours per day or 4200 hours per year. Even if you use, say gas for refrigeration and batteries for lighting and small appliances, the generator set will be running at least 4 hours per day or 1400 hours per year. We'll leave you to work out the fuel costs and remind you that the

average generator life before major overhaul is from 5000-10,000 hours. Our system is powered by wind and sun (80 percent) and a 240v slow speed petrol generator set (20 percent). The latter runs 4 hours per week so our total energy bill for the year is less than \$200.

Horses for Courses

Another comment which frequently comes up is 'we have a 5 kva Brand X generator set but it won't start this, that or the other'. On further questioning, these people have usually been saddled with (pardon the pun) a portable generator set which because it is light and cheap, is not capable of starting larger electrical items, nor will it start induction motors. Even though the engine part of the generator set is rated at 10 HP, the 10 horses developed by this sort of engine will be ponies compared to the 10 Clydesdales developed by a fixed generator set.

While a manufacturer will rate the engine component of a generator set at, say 10 HP, a quick glance at its performance graph will show that it really will not give you 10 HP and that under normal operating conditions, the horsepower delivered will be somewhere between 7 and 8 HP.



A graph like this will provide heaps of info. about the generator set you're looking at and requires minimal mathematical ability.

Most manufacturers will specify what sort of work your generator set is best at — whether it is a lightweight, suitable for campers or whether it is designed to start induction motors, so read the information carefully before you buy and you should end up with a set suited to your needs. Buying a generator set because it is cheap is probably the worst reason you could have.

Our next article will be about sizing generator sets for maximum fuel efficiency and minimum engine wear.

We are happy to help people with specific questions relating to alternative power generation — write to us, Anne and Robin Hughes, RMB 202, St. Arnaud 3478 or call us on 054-963-268.

CHOCK AND LOG FENCE

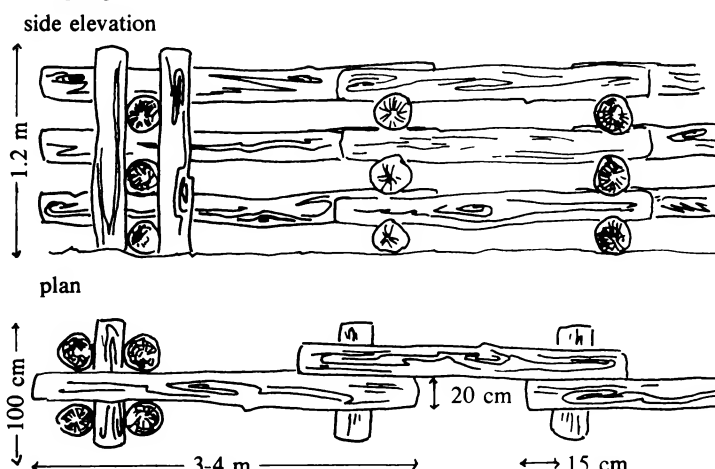
by Sam Harris, Gulgong, NSW.

This type of fence belongs to a bygone age, uses no metal fastenings and looks quite attractive. Provided you have plenty of timber, you can make a strong fence that is an effective stock barrier. There may be some variations, but the basic method is as follows.

For the fence, you need to choose reasonably straight logs about 20 cm (8 in) thick and 3-4 m (10-12 ft) long. The chocks should be the same thickness and about 75-100 cm (2½-3 ft) long. You will also need a small number of posts about 2 m (6 ft) long, depending on the height of fence you

Begin by setting four posts in the ground in a square, far enough apart to place logs or chocks between them. Cut a notch on the upper side of the first chock and place it on the ground between the posts, at right angles to the fence line. Cut a matching notch on the log and place it on top of the chock. Add two or three more chocks and logs, similarly cut, until you reach the height you want for your fence. It is very important to make sure that you match the cuts or notches on the logs and chocks, as this is what holds the fence together securely. Where poles overlap, the end of each pole should overhang the chock by at least 15 cm (6 in) for a stable join.

You can continue in this way for a considerable distance, only using upright posts set in the ground at corners (as at the start). Make sure that you bed the bottom chock firmly onto the ground, otherwise the rest of the fence will not have a



steady foundation and will move under pressure.

If you want the fence to look good, choose your timber carefully so that the logs are even in size. With a bit of practice, you'll be able to notch the logs and chocks to fit together neatly. It is best to remove all bark, and you may also want to treat the wood with some kind of preservative.

This method will make a strong stock (but not vermin) proof fence, though it won't stand up to bushfires.

NEW DEVELOPMENTS IN FENCING

WIND-POWERED FENCES

A windmill and an electric fence, in use for nearly four years on a British upland farm, has cut the cost of containing a flock of 200 sheep. Costing half as much as a traditional sheep fence to install, the windmill-electric fence requires little supervision and has proved far more effective than any other method of containment for the flock. Using close-grained wooden stakes which need no insulators, the 1800 m (1970 yds) of five-strand wire and 600 m (655 yds) of two-strand wire has been connected to the windmill, which has 890 mm (35 in) diameter blades on a 2.45 m (8 ft) pole erected in an exposed corner of the pasture.

(Ted Wild, White Knowle Farm, Chapel-en-le-Frith, High Peak, Derbyshire, England).

EASIER ONE MAN FENCING

A long handled wire strainer for one man fencing and repairing is available from a British company. Claimed to be three times faster than other wire strainers currently available, this tensioner can be supplied with a companion set of leather belt to hold the strainer, staples and other fencing tools.

(Net-Tex Agricultural, 8 Milton Road, Gravesend, Kent, England, DA12 2RE).

Kerosene is good for cleaning baths, basins and taps, getting off soapy scum and limescale, and promoting a fine shine. Rinse it off thoroughly to avoid any lingering smell.



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WWOOF

practical organic education in Australia

by Lionel Pollard, Boronia, Victoria.

WWOOF has become well known around the world in recent years for organising the chance for people to visit organic farms for purposes of exercise, learning, or socialising. It has proved of immense value to WWOOFers and farmers alike in all these ways. Many organic farms are small in size and depend heavily on seasonal or casual labour for their work needs. Many are fairly isolated, either geographically or socially, in that they feel left out of things because of their commitment to a sustainable lifestyle. To such farms, the visit of a WWOOFer is like a breath of fresh air! The basis of such visits is that you donate your labour in exchange for meals, somewhere to sleep or pitch your camp, and the chance to learn more about organic growing. The farmer can win in the learning stakes too because many WWOOFers are skilled in areas which the farmer may wish to learn about.

In Australia we provide a list of the 95 or so farms in our network at a cost of \$10. Members are then free to contact the farms of their choice to arrange mutually convenient visits. As well as the farms suitable for students, the list contains details regarding accommodation, food, smoking, children, farm type and work needed so an informed decision can be made. Farm types range from a large garden of 1 ¼ acres up to farms of 3 or 400 acres of mainly grazing land. Most, however, have only a few acres under intensive use for fruit, vegies, poultry, goats, horses, house cow, geese, bees or other specialities. The combinations of these seem endless, and a wide variety is assured. There are some 16 WWOOF or similar organisations around the world. As they are all autonomous bodies, they tend to have slightly differing ways of achieving their similar aims, but if you are travelling to Europe, North America or New Zealand, you could do a lot worse than make contact with, and use, these networks as a way of travelling cheaply, and as a way of getting closer to the

people than the average tourist will ever do.

With the commencement of its Organic Farming Studentships programme, Willing Workers on Organic Farms has opened up a second stage of practical education in organic farming techniques, the first one of course being its four-year-old WWOOF scheme. Aimed mainly at the needs of the serious student of agriculture (many degree and diploma students are required to complete some weeks or months of practical farming work experience as a part of their course) OFS offers a list of organic farms which are prepared to take students in on a 'work for keep' basis. From this list the student can shortlist two or three farms s/he would like to visit. Because the biggest demand for this type of service comes from overseas, we offer a booking service to save time and effort in writing. This costs \$10 in addition to our standard joining fee of \$10 to obtain the farm list.

Perhaps a love of the soil and an understanding of the needs of the planet's skin, are the main philosophical differences between the organic and the chemically dependant farmer. It seems that most people with this attitude to the world we live in tend to spread it into other areas of our life, and in particular to the way in which we see, and behave towards, our fellow man.

Whatever the truth of these conjectures the fact is that here as well as overseas WWOOF has operated for 12 years since its first appearance with a minimum of rules and with an absolute minimum of problems. We tend to put great stress on expecting members to remember the golden rule, and it seems to work. If you feel that you have or can develop these sorts of attitudes, why not consider becoming a part of the network, either as a worker or as a farmer. Contact Lionel Pollard at 7 Duncan Ave, Boronia 3155, Australia for a brochure, mentioning your interest.

working with WWOOF

by Steve and Carol Smith, Castella, Vic.

We would like to share with you all a wonderful experience. We are members of Willing Workers on Organic Farms (WWOOF). It is an organisation designed: to help the organic movement which is often labour intensive and does not rely on chemicals for fertility or persistent poisons for pest control; to give first hand experience of organic farming methods; to give a chance to live in the country; to give a chance to meet, talk, learn and teach with other members of the organic movement in a 'work for keep' situation.

We live on eleven acres in our owner-built, permaculture design, mudbrick home (not yet completely finished). We have one acre of organic blueberries, commercially viable, and of course an organic vegie garden from which we feed ourselves, also a young fruit and nut orchard. We are into peaceful living within our environment, becoming as self-sufficient as possible, and thoroughly enjoying our daughter.

As host members we invite willing workers to share our

life for a time. A 19 year old Danish girl stayed with us this year. Through WWOOF we are now great friends. In September 1986 she wrote to us, introducing herself and telling us of her desire to travel and learn more about organic farming and to experience an organic, vegetarian lifestyle in Australia. We returned her letter, introducing ourselves and describing our lifestyle. She arrived in Australia on November 11th for six months' stay with us. We are certainly going to miss her when she leaves.

Our farm and house are coming along in leaps and bounds with an extra pair of hands, and we have made a lifelong friend. Our activities are anything from tiling the bathroom, spinning wool, landscaping, vegie gardening, picking and mulching blueberries, and of course a new style of cooking and eating for her . . .

It's amazing how much you receive while you are giving. Why not give it a go!

Natural Goat Care

by Pat Coleby, Garfield, Vic.

I get many enquiries about mineral analysis of soil, and what to do about the results of such an analysis. I think it would help people if I gave a brief resume of what has happened on this property up to date. At present I consider the goats to be milking about 80 per cent of their potential, better than they have done since the sublethal nitrate poisoning caught up with me and many others after the 1982/3 drought. So I feel that at last I can tell that I have been doing something right, and some of the things I have done were in the nature of calculated gambles, albeit backed up by reading some of Albrecht's invaluable works, and extracts from the same in that excellent ecological paper *Acres USA*.

To begin at the beginning: the original soil analysis showed calcium was low, magnesium practically non-existent, potassium below half of what it should have been and sodium eight times too high. The latter two figures are the direct result of a long history of chemical farming. Manganese was OK, copper down two thirds of what it should have been, cobalt down a quarter, molybdenum the same, boron slightly down, and iron six times higher than it should have been. The latter figure is partly explained by the fact that the other elements were all much too low, and partly by the fact that all Australian soils, due to old volcanic activity, are high in iron. Phosphorus was OK, organic nitrogen slightly down and the pH stood at 5.6 — much too low.

Much of the above information could be gathered by just looking at the plants that did grow — varieties of hairy grasses like fog grass (hairy grasses are always poor quality), a great deal of sorrel, docks, bracken and far too much clover. Clover should be part of the pasture, not the entirety.

The health of the goats soon showed that things were badly wrong, in spite of my giving them dolomite, seaweed meal (ad lib), and copper. I unwisely thought that the smaller shortfall of cobalt could be borne by the seaweed meal, which contains it among all the other elements present. This time last year I had most of the herd drying up fast, which should not have been happening; the previous Christmas I'd realised that if I was to keep them alive I would have to start feeding cobalt sulphate in the feed — a teaspoonful a day between forty goats for the first month, then about three times a week, and double up on the copper, so each goat got one teaspoonful per week. The dolomite was fed as usual, which amounted to two full mugs a day mixed half in the night feed, and half in the morning; seaweed meal ad lib as usual completed the picture. I had had the land topdressed with dolomite, copper and cobalt as per the recommendations of Mineral Fertilisers who had done the analysis, but they had refused to put extra magnesium in the mix, so I was still left with an imbalance.

By the 1986 kidding things were starting to fall into line, the goats came in well, and did not — as they had in the previous year — suddenly drop their milk by nearly three quarters when the dry weather came in late December. But I was still unhappy about the low magnesium, so was very pleased when my local branch of Mineral Fertiliser suppliers, South Eastern Minerals in Warragul, told me they had access

to magnesite, which apparently the S.A. firm did not at the time I had my topdressing done. I arranged for 3½ tonnes to be spread on the farm (9 acres), and then spent a few weeks chewing my fingernails (figuratively!) and wondering if I'd thrown the whole thing out of balance, but was reassured when Chris Alinson, who is very good at minerals, sent me a photocopy of the relevant chapters of Albrecht's book. Now, which is early April, I know I did the right thing: the farm has 'come away' with the autumn break far ahead of my neighbours', the herbage is a nice deep green, and the clover is fifty/fifty with the grass. But the best sign of all is the goats: this year, as mentioned in the opening paragraph, they are nearly right; the milk rose steadily from the week following the first rains, and they are really trying — the amount of milk leaving the farm is over twice what it was this time last year, from the same number of animals. They seem happy and contented and also, for the first time for three years, all came in season within a week of each other in the first week in March — a sure sign that all is well, even if it was a bit chaotic at the time!

Another part of my ongoing organic husbandry is the use of a Wallace Soil Conditioner or Aerator, used with the contours over the entire farm. I used it the first year, but due to the pressure of work only a couple of acres got done last year, so hopefully we'll manage to do the whole farm this winter. And the last and probably the most important part is the spreading of manure from the goat house gradually over the whole farm, working across it from one side to another. A trailer packed VERY full covers about 10 x 50 metres each time, and it is very easy to see where it has already been spread by the thickness of the pasture and the presence of some of the better varieties of grass, which can now thrive due to the improved mineral and general health of the soil. Another quite unexpected spinoff from spreading the manure was that where I have already done so the bracken is dying out and getting weaker. I had expected to see it ten foot high after all the encouragement, but it has now dawned on me that bracken likes a weak and rather sour soil; I mentioned this fact when talking at the Australia Day East Gippsland Organic Farming Seminar, and one or two people told me they had observed the same thing, so we know one answer to bracken that is a whole lot more beneficial than sprays.

So now, as usual I am looking forward to next season's kiddings, hoping for even better things with the goats right up to what they should be.

Stephen Robertson has again come up with a most interesting letter, and I fully concur with his remarks about chemical drenches, which is one reason for getting the farm in top nick — animals in such conditions need the minimum, if any, drenching. Years ago I had a doe that never seemed to need drenching. In those days I knew very little except what I was told, but even then I only drenched when they showed they needed it — never strategic drenching; I decided to watch Maralinga, as she was called, and see if she ate anything different from the others. Sure enough, every

CRYPTIC GRASSWORD

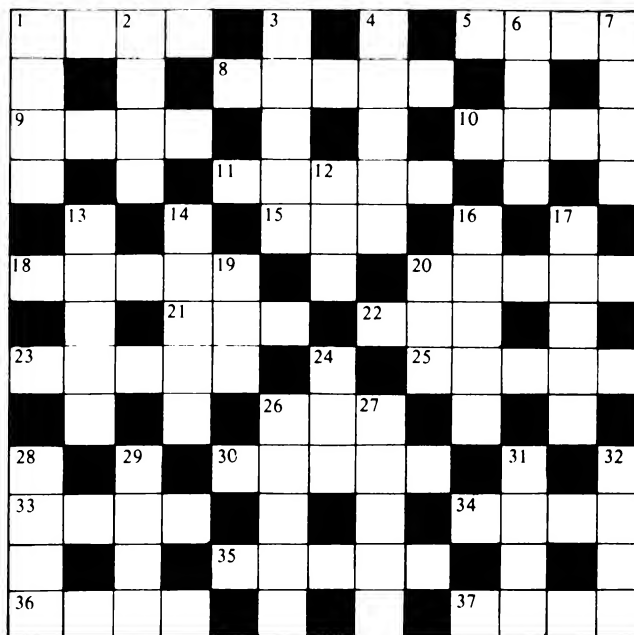
by M. Riley, Newborough, Victoria.

Across

1. Made about cheese.
5. Enquiries when Bet leaves the baskets.
8. A woman either way.
9. Dispose of outhouse.
10. Fresh diet on waterfront.
11. Vat is in a narrow view.
15. Born in knee-cap.
18. Teams up.
20. Dark thing.
21. Bashful throw.
22. Performed either way.
23. Cover with metal dish.
25. Steal the smallest amount from it.
26. Slime in Bermuda.
30. Five is or used to be part of helmet.
33. Oriental seat.
34. Fasten and run away.
35. Prickle from North.
36. Bind and whip.
37. Ears burn.

Down

1. Besides other eels.
2. Assist in a wager.
3. Fabric not stood in.
4. New state for sense.
6. Earth stain.
7. Eye for the future.
12. Kind of appeal.
13. Names visits.
14. Five East arrange short match.
16. Conceals coats.



17. Breast box.
19. He's for a female.
20. Nothing in the Nile.
24. Vehicle raises a sub.
26. Strength maybe.
27. Rowdy arrangement for bride.
28. Endorse fish eater.
29. Utilises end of fuses.
31. European post.
32. Rats surface for heavenly body.

Solution on page 66

morning when let out after milking she made a beeline for a small hole she'd niggled in a wire fence so that she could get a mouthful of honeysuckle, apparently the others had never noticed it; those few leaves a day or so were enough to keep the worm population in check. It is difficult to get enough herbs for large numbers of goats, and I don't only consider them as anthelmintics, but feel they are a very good addition to the diet in general. When milking commercially garlic is not on, as garlic flavoured milk is not popular with the general public. Unfortunately the taint does come through occasionally, even herbs like tansy and wormwood can act in this way if fed too much. People from countries like Greece, Italy and round the Mediterranean are used to highly flavoured milk because their goats habitually eat much stronger herbage than grass, and they reputedly find our milk rather tasteless and bland.

Of course goats who are on land that is fully balanced, and get some dolomite in their feed as well (especially if they are fed bought-in feed) will not get mastitis, so that is one worry less. The only ones who do are, sadly, those with CAE, because their systems are out of kilter, hard udders of course also go with that condition. That is one bonus since going on an eradication programme. I found hard udders quite the most depressing part of the whole business, especially as they are patently so painful for the goat as well; thank goodness they are a thing of the past — of course they were nearly unheard of

until the early seventies when CAE first became known.

I also saw *The Home Horse Doctor* years ago, and found it most interesting; I have a book on horse management written in the middle eighteen hundreds, and find it equally useful. I've always reckoned goats are more like horses than cows to look after. One of the chief reasons for my farming methods is that I consider prevention, by having the animals in optimum health, so much more rewarding than having to treat animals when they become sick. Of course, beyond putting bells on the goats — which do help — there's not much one can do about the occasional snakebite as far as prevention goes! Next time I will write about selenium deficiencies.

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Grass Roots Reading



The Bumper Book

The Bumper Book is a special Christmas publication in which readers have come together in the true spirit of Christmas and have shared their thoughts, philosophies and ways of living. It has stories on self-sufficiency and instructions on how to make Christmas gifts.

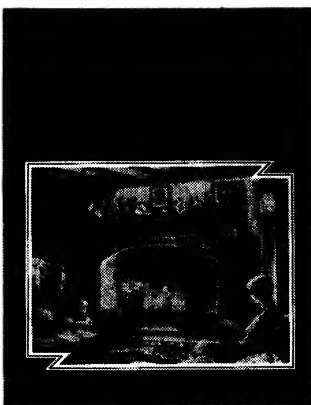
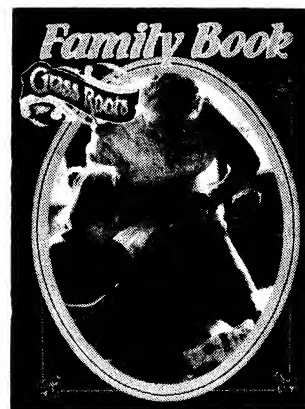
p/b 136 pp \$4.50 post paid.



Family Book

This is a diverse collection of stories about Australian lifestyles. The readers' stories illustrate how different families adapt their needs to create a lifestyle that is personally satisfying — role reversal, extended families, home birth, birthdays, pets and recycling.

p/b 144pp \$6.50 post paid.



Fireside Reader

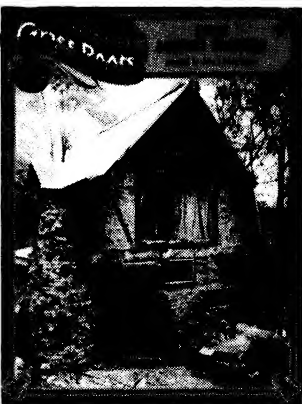
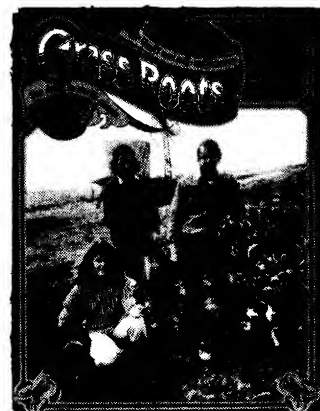
This book is packed with stories and practical information. Stories of how winter used to be as well as plenty of up-to-date crafts and activities such as growing trees for firewood, embroidery, making jams, crosswords, knit a pair of slippers and make your own earrings.

p/b 136pp \$7.50 post paid.

The Early Years

The Early Years is a reprint, by popular demand, of the first five issues of *Grass Roots*. In its pages is an amazing collection of hard-to-find information from making sleeping bags, raising an orphan lamb to making bread, cheese and yoghurt.

p/b 240pp \$14.50 post paid.



Earth Builder's Companion John & Gerry Archer

The Earth Builder's Companion is a manual on how to design and build your own earth house. This book contains all the information you need to put a roof over your head without council hassles or a 25-year mortgage. Full of helpful advice on design principles and practice.

p/b 136pp \$7.50 post paid.

Grass Roots Binders: these are made from tough, dark brown vinyl with a white logo. They hold 8-10 magazines as well as *The Early Years* and any of the *Companions* or *Bumper Book*. An ideal way to keep your library together and prevent the neighbours pinching your back copies. Price \$9.95, includes post and packing.

COMMUNITY MARKETS

A Practical Guide

John van Tinteren



p/b 128 pp \$13.50 post paid

Here's the book for every farmer, market gardener or home grower who has produce to sell. It explains in detail how to make a living from selling your goods at local markets, even how to start your own market if none exist in your area. Includes lots of money-making ideas and a handy directory of markets throughout Australia and NZ.

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GRASS ROOTS BOOK NEWS

August, 1987

Reading for Independent Living

I know it's still winter, but already there are hints that spring is not too far away: a little sparkle in the air, a slight spring in the step and a reawakening to the wonders of new life about to develop. However, the nights are still long and cold, so there's plenty of time yet for reading in front of the fire. Here's a selection of new books to keep you entertained and informed while you plan your springtime activities. The emphasis is still on winter crafts and cooking, but there's a good range of books for all tastes and occasions. Here's to the end of winter chills!

Happy reading,
Kath.

COOKING



KIDS IN THE KITCHEN — V. Leng and J. Ryles. Soft cover, 144 pp, Aust. RRP \$12.95.

Another delightful book from Vikki the Vego and friend! This one introduces kids to the joys of cooking their own food, as well as giving them lots of helpful hints on nutrition, hygiene and kitchen safety. There is a wonderful variety of deliciously healthy snacks and main meals to choose from, and most can be made by the kids without (much!) adult help. A great way to start them off.

HOME WINEMAKERS RECIPES — D.T. McKechnie. Soft cover, 80 pp, NZ, RRP \$5.95.

The ideal book for those who believe in the good things of life, but don't want to pay for the commercial product. Here's how to make your own wines, from fruit, vegetables and an amazing variety of other ingredients. Each process is outlined clearly and there are lots of helpful hints and problem-solving techniques. Basil and Rosemary would approve!

A GOOD PLAIN COOK — S. Addison and J. McKay. Hardcover, 152 pp, Aust. RRP \$18.95.

A nostalgic journey into Queensland's culinary past, this book will delight anyone interested in the way things used to be done in the kitchen. There are lots of useful recipes from the days of cast iron pots and wood stoves, and the book is beautifully illustrated with photos and engravings of bygone days. Snippets of colonial wit and wisdom enliven each page.



TASTE OF LIFE FOR CHILDREN — Julie Stafford. Soft cover, 144pp, Aust. RRP \$12.95.

Julie shows how to develop healthy eating patterns, by producing delicious meals that are simply prepared and beautifully presented. There are fun recipes, many of which the children can make for themselves, and Julie also includes advice on nutrition and how to deal with food fads.

Other popular books on food:

TASTE OF LIFE — Julie Stafford. \$12.95.

MORE TASTE OF LIFE — Julie Stafford. \$12.95.

NATURAL TUCKER — John Downes. \$14.95.

NATURAL TUCKER BREADBOOK — J. Downes. \$4.95.

MOREISH VEGETARIAN RECIPES — K. Meyer. \$9.50.

PASTA SALADS — Susan Meyer. Soft cover, 146 pp, USA, RRP \$14.95.

Here is a collection of delectable recipes combining a wide variety of pastas with vegetables, fruits, nuts, seafood, meats and cheese to produce mouthwatering entrees, lunch dishes or main courses. Many of these delicious recipes can be served either hot or cold, depending on the season. They're healthy too!

PESTOS! COOKING WITH HERB PASTES — Dorothy Rankin. Soft cover, 148 pp, USA, RRP \$12.95.

Wonderful new ways of using everyday herbs. The author shows how to make simple — and simply delicious herb pastes, then gives details of their use in a wide variety of recipes — pasta, seafood, soups and salads. And the pastes can be made with fresh herbs in season, then frozen till needed. Keen cooks will love this book!



SELF-SUFFICIENCY

AGRICULTURE — Rudolf Steiner. Soft cover, 175 pp, UK, RRP \$19.95.

Here are the original lectures given by Rudolf Steiner, setting out the philosophical and practical bases for the bio-dynamic agricultural method which has since been enthusiastically adopted worldwide. He sets forth his ideas about the relationship of the soil with the wider cosmic forces and gives details on how to put these ideas into practice.

HARD TIMES HANDBOOK — K. & I. Smith. Soft cover, 233pp, Aust. RRP \$7.95.

Containing a wealth of practical information and advice, this book has something for everyone. You'll refer to it for information on making your own bread, managing the food supply, preparing yourself for emergencies, making money without a job, organising a city garden and more.





CRAFT

CHALLENGING PROJECTS IN STAINED GLASS — Mt Tom Stained Glass Artisans. Soft cover, 161 pp, USA, RRP \$18.95.

This extends the skills and techniques introduced in the first book *Starting Out in Stained Glass* (reviewed in GR 61). The projects are more complex, but well within the capabilities of anyone with some basic knowledge. Directions are clear and illustrations plentiful. Beautiful projects!

AUSTRALIAN PATCHWORK AND APPLIQUE — Nan Bosler. Soft cover, 36 pp, Aust. RRP \$5.95.

An economical book for beginners, this gives instructions for simple designs using Australian motifs. You can create cushions, cot covers, tablecloths and many other decorative articles by following these simple directions. Embroidery stitches are added for an attractive finish.

CLASSIC KNITTED COTTON EDGINGS — Hewitt & Daley. Hardcover, 112 pp, Aust. RRP \$18.95.

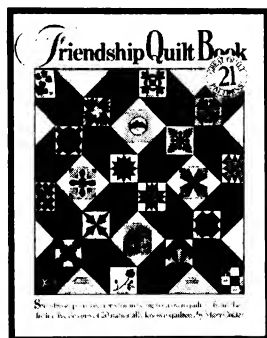
A collection of patterns for exquisite edgings to trim clothing and linen — delicate but very durable in white cotton. This craft is portable, easy to learn and highly addictive! Patterns are graded so that beginners and experienced knitters can create that beautiful oldfashioned look for garments and gifts.

WOODCARVING — Maurice Woods. Soft cover, 92 pp, UK, RRP \$27.95.

A very thorough introduction to this enduring craft. The book covers the basics of choosing wood and organising tools, then describes the main types of carving — relief, round, edge, carving heads and small articles — as far as putting the finish on your product. Very comprehensive.

WEAVING WITHOUT A LOOM — Barbara Pegg. Soft cover, 112 pp, UK, RRP \$29.95.

The author describes a variety of simple methods of weaving, none of which require expensive equipment. She shows how to create beautiful braids, belts and decorative tapestries using just your fingers and a few pieces of wood. Directions are clear and well illustrated. A good starting point for beginners.



KNITTING IN PLAIN ENGLISH — Maggie Righetti. Soft cover, 215 pp, Aust. RRP \$19.95.

Intended for beginners with two left hands, as well as experienced knitters who want to improve their technique, this book tells you everything you need to know to become a competent knitter. Basic and fancy stitches, choosing patterns, giving a professional finish, helpful hints and shortcuts — they're all here.

THE USE OF VEGETABLE DYES — Violetta Thurstan. Hardcover, 48 pp, UK, RRP \$16.95.

Useful for anyone wishing to make their own dyes from leaves, flowers, berries, lichen or bark of plants. The book is English, but the techniques are the same and many of the plants can be found in this country. There is also scope for experimenting with other plant matter once you've mastered the basic method.



TOYS TO MAKE — S. Esdaile & A. Sanderson. Soft cover, 136 pp, Aust. RRP \$12.95.

Here is a wonderful range of toys — rattles, dolls, mobiles, blocks, puppets (and a few that defy description, but look great fun!) — for children of all ages and tastes. They are easy to make, often from recycled materials, educational, and should provide hours of fun for the whole family.

THE FRIENDSHIP QUILT BOOK — Mary Golden. Soft cover, 152 pp, USA, RRP \$27.50.

This describes the delightful idea of co-operative quilting — creating a quilt as a joint project among a group of friends, for a parting, wedding or birthday gift. Full instructions are given for planning, making and finishing a wonderfully enduring memento for someone special. Classic patterns are included for inspiration.

THE SELF-RELIANT POTTER — Andrew Holden. Soft cover, 144 pp, UK, RRP \$33.95.

Invaluable for anyone who has a basic knowledge of pottery techniques and wants to develop an individual style. The book describes how to make your own glazes from local materials, how to build and operate a variety of kilns and how to make your own wheel.

CREATIVE FELTMAKING — Kay Donald. Soft cover, 72 pp, Aust. RRP \$5.95.

Creative Feltmaking outlines how easy felt is to make. The author explains the feltmaking process very clearly and tells how to avoid possible problems. There is also information on decorating felt, extending the basic technique so you can work in the round to make berets, hats and even seamless garments.

HEALTH



CHINESE INFANT MASSAGE — Ray Tiquia. Soft cover, 96 pp, Aust. RRP \$9.95.

This book presents a safe, natural way to keep your baby happy and healthy. The author lists major accupressure points, and describes the basic techniques and explains how to use them to treat particular childhood health problems. Ideal for those who prefer to avoid drug therapy and practise preventative health care!

SAFE NATURAL REMEDIES FOR DISCOMFORTS OF PREGNANCY — Coalition for the Medical Rights of Women. Soft cover, 29 pp, Aust. RRP \$3.95.

Anyone concerned about maintaining the health of the unborn child will want a copy of this book. It lists ways of preventing as well as treating common pregnancy problems — backache, constipation, cramps, oedema, morning sickness and so on. Advice on safe and not so safe medication is also included. Very Helpful.

HOME BIRTH STORIES — by Australian parents. Soft cover, 32 pp, Aust. RRP \$4.00.

These wonderfully moving accounts will inspire anyone considering the option of home birth. They describe a great diversity of experiences, but all reveal the joy and fulfilment of taking control of this most intimate of all experiences. Parents tell their own stories, so that the reader directly shares the excitement, pain and relief of labour and birth in a loving family setting. Wonderful reading!

AUSTRALIAN MEDICINAL PLANTS — E.V. Lassak & T. McCarthy. Hardcover, 240pp, Aust. RRP \$32.95.

This book contains a clear description of plants and their various medicinal properties used by both the Aborigines and early settlers. Uses of these plants include narcotics and painkillers, antiseptics and bactericides to treat headaches, colds, fevers, skin disorders and to aid digestion and elimination. Also contained is a valuable table of plant uses and numerous colour photographs to facilitate identification. For anyone interested in natural healing.





FOCUS ON CRYSTALS — Edmund Harold. Soft cover, 160 pp, Aust. RRP \$12.95.

The ideal book for those who are interested in the healing properties of crystals. From long lost knowledge of ancient civilisations to recent scientific discoveries, the author shows how the psychic properties of crystals can be used to achieve health and harmony within the human body and spirit.

DIET, HEALTH AND DISEASE IN AUSTRALIA — (ed) Dr. Paul Nestel. Soft cover, 155 pp, Aust. RRP \$12.95.

A knowledgeable explanation of the whys and wherefores of the diet revolution that is taking place in Australia today. It explains basic food facts and gives up to date answers to questions about the connection between diet and diseases such as cancer, diabetes, heart disease and alcoholism. Down to earth advice from the experts.

BODY TALK — Michael van Straten. Soft cover, 240 pp, UK, RRP \$15.95.

A very useful handbook for those who want to take charge of their own health. The author has wide experience in alternative therapies and spent many years giving health advice on British radio. He gives clear descriptions of most common health problems, explains their causes and provides no-nonsense advice on what to do to improve or avoid each condition.

INNER WORK — Robert Johnson. Hardcover, 221 pp, USA, RRP \$23.95.

A fascinating explanation of the role that the unconscious mind plays in our lives and our personalities. The author presents a four step program for developing personal wholeness by using our dreams and imagination as an active, creative part of ourselves, discovering our hidden strengths and concealed resources.

TAKING CARE — David Smail. Soft cover, 165 pp, UK, RRP \$17.50.

A very interesting discussion of ourselves in society, this book presents a new way of looking at our problems. The author argues that instead of depending on standard therapy, we must learn to take care of each other, carefully tending relationships. He offers a glimpse of a different reality, how the world could be rather than how it is. Hope for those prepared to work towards it.

FRUIT AS MEDICINE — Dai Yin-fang and Liu Cheng-jun. Soft cover, 126pp, Aust. RRP \$12.95.

This book records the traditional medicinal uses of fruit by the people of China, and offers a sensible approach to self treatment for a variety of common ailments. The fruits are identified by Latin as well as common and Chinese names, and many are well known in Australia. Clear directions are given for use of each fruit.

GENERAL

STARTING A MINI-BUSINESS — N. Olsen & M. Elliott. Soft cover, 135 pp, Aust. RRP \$8.95.

A practical guide to starting a small-scale business in Australia, this book is designed for retired people and others who want to earn their living from home. It is full of good advice on planning, organising your time and materials, keeping records and publicising your activities. Helpful for those just starting.

TOURING ATLAS OF AUSTRALIA. Soft cover, large format, 76 pp, Aust. RRP \$11.95.

Accurate and up-to-date road maps which are clear and easy to read, key map for each state, capital city maps and a fully detailed index to help you find where you're going. Very useful for those on the move around Australia.

KRISHNAMURTI — Pupul Jayakar. Hardcover, 516 pp, USA, RRP \$39.95.

This very detailed biography by one of his most devoted disciples lovingly describes Krishnamurti's life, his early links with the Theosophical society and the development of his religious/philosophical teachings. His ideas, springing from but going far beyond the ancient religions of India, are expounded in many dialogues with his disciples. Fascinating reading.

GARDENING



AN AUSTRALIAN HERBAL — Penny Woodward. Hardcover, 184pp, Aust. RRP \$29.95.

A practical guide to growing and using herbs in temperate Australia and New Zealand, for beginners as well as experienced gardeners. It describes in detail the propagation and cultivation of 176 herbs, with lists of herbs for specific uses. Also included are a list of herb societies and a guide to herb nurseries and suppliers. A valuable reference.

THE LOW MAINTENANCE GARDEN — Graham Rose. Soft cover, 168pp, Aust. RRP \$19.95.

The idea behind this book is to create a garden that looks after itself. It is a fully illustrated guide to how to have an attractive garden where you can relax rather than work, with sections on design, site preparation, selection of plants and general garden care. For those who want a garden for enjoyment, not work.

A BIRDLOVER'S GARDEN — Shirley Cherry. Hardcover, 56 pp, Aust. RRP \$9.95.

This charming little book describes how the author made her garden a haven for bird life. She explains which plant species are likely to attract birds and provides entertaining anecdotes of life amid her feathered friends. Delightful!

HANDBOOK ON COMPOSTING AND THE BIO-DYNAMIC PREPARATIONS — G. Corrin. Soft cover, 34 pp, UK, RRP \$3.00.

This little booklet will be useful for all those who want to learn more about the methods of bio-dynamic growing. It describes how to make properly balanced compost and the correct way to produce and use the various preparations based on the ideas of Rudolf Steiner.

BUILDING

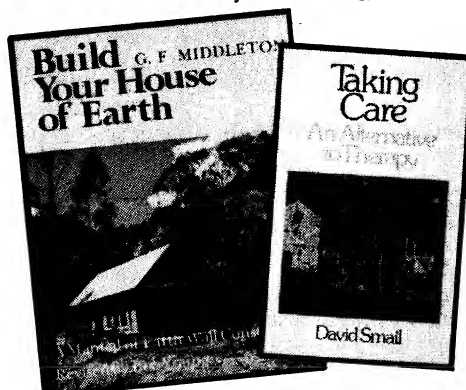


HOW TO MAKE A TREADLE-OPERATED WOOD-TURNING LATHE — B. Ingham and P. Smith. Soft cover, 32 pp, UK, RRP \$8.95.

One of a series on building your own workshop equipment, this book gives step-by-step instructions on how to make and use a foot-operated lathe to turn wooden items such as bowls, chair legs and lamp bases. Each step is clearly illustrated and includes details of materials and tools required to complete the project. Ideal for the home handyman.

BUILD A YURT — Len Charney. Soft cover, 134pp, USA. RRP \$10.95.

A yurt is a circular latticework house with slanted roof beams whirling to the skylight. It's adaptable to any climate and can be portable or permanent. The author explains how to build a yurt, reveals some trade secrets, short cuts that he has developed, and helpful hints on how to make the most from your materials.



BUILD YOUR HOUSE OF EARTH — G. Middleton. Soft cover, 130 pp, Aust. RRP \$16.95.

A useful basic text from a recognised expert in earth-building techniques, this book covers both adobe (mud-brick) and pise (rammed earth) construction. Information is for Australian conditions and some sample plans are included. Helpful for beginners.



ANIMALS

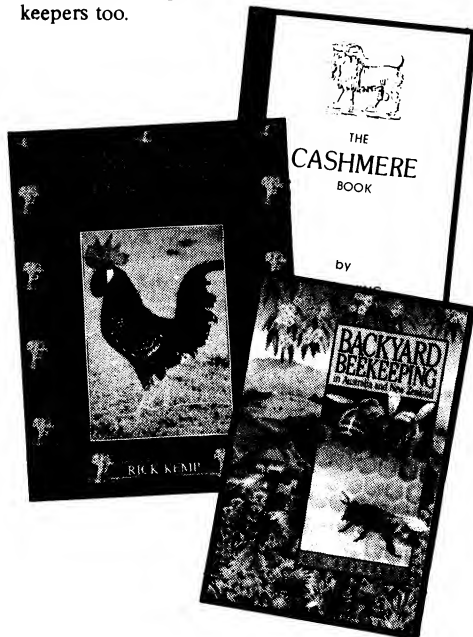


PRACTICAL HORSE NUTRITION — R. Kerrigan. Hardcover, 204 pp, Aust. RRP \$29.00.

A very detailed analysis of the food requirements of horses and how to provide them most effectively and economically. The book is based on the author's extensive experience in this area and contains a wealth of practical advice for all horse owners.

BACKYARD BEEKEEPING IN AUSTRALIA AND NEW ZEALAND — C.N. Smithers. Soft cover, 118 pp, Aust. RRP \$14.95.

This book is intended to be a comprehensive reference for anyone wanting to have healthy bees and produce their own honey. It has information about the lifecycle of bees, basic equipment needed, how to care for a colony and harvest the honey and wax. A very useful reference for beginners and experienced beekeepers too.



THE CASHMERE BOOK — J. Irving. Soft cover, 120 pp, Aust. RRP \$20.00.

This book is intended as a basic reference for beginning as well as established cashmere breeders. It describes the ideal cashmere goat, details the condition and equipment needed for proper care and maintenance of your flock, and includes helpful tips on harvesting the fleece and showing your animals. Not always well organised, but useful.

PURE BREED POULTRY RAISING — Rick Kemp. Soft cover, 80 pp, Aust. RRP \$10.95.

Here's the book for those inspired by the *Grass Roots* articles on pure breed poultry. The author describes the characteristics of the major breeds and what to look for when choosing stock, explains how to feed, house and care for your birds and outlines breeding and incubation procedures. Very helpful for beginners.



KIDS

MY DAD AT HOME — Frank Wilmott. Soft cover, 16pp, Aust. RRP \$5.95.

GRANDMOTHER'S YARN — Maria Lewitt. Soft cover, 16 pp, Aust. RRP \$5.95.

These two books are written to give kids a positive view of changing family situations. In simple language and colourful pictures, they tell the stories of a day at home with house-keeping dad or firm but understanding Polish grandmother. The message of understanding and tolerance is clear but not forced. Good for reading aloud to young ones.

ENERGY FOR KIDS — E. Honey and G. Tippet. Soft cover, 56 pp, Aust. RRP \$4.95.

OUTDOORS FOR KIDS — B. McKinlay. Soft cover, 56 pp, Aust. RRP \$4.95.

TUCKER FOR KIDS — J. Apted and E. Honey. Soft cover, 51 pp, Aust. RRP \$4.95.

GARDENING FOR KIDS — B. McKinlay. Soft cover, 56 pp, Aust. RRP \$4.95.

This series is full of information and activities designed to help kids find out for themselves about forms of energy, seasons and weather, food and nutrition and the wonder of growing things. They should stimulate the imagination of young readers and make scientific learning fun. Areas for home learning too.

FIRST LOVE FIRST SEX — Kaye Wellings. Soft cover, 192 pp, Aust. RRP \$16.95.

An essential guide for young people today, this book provides down-to-earth information and advice on all the troublesome questions of adolescence: how sexual relationships begin, develop and (sometimes) end; how to improve your self-image; what to do about birth control; in short, how to develop personal responsibility for your own emotional and physical needs. Great for parents too!

SWEET DREAMS AND MONSTERS — Peter Mayle. Soft cover, 32 pp, Aust. RRP \$9.95.

Designed to reassure all those children who've ever had a bad dream, this book explains in simple language what happens when we sleep, how our brains keep working as our subconscious makes sense of all the day's experiences. Kids will love the illustrations too — all the monsters you've ever imagined!

MELISSA'S GHOST — Michael Dugan. Hardcover, 102 pp, Aust. RRP \$14.95.

When Melissa and her parents move from Melbourne to fulfil their dream of a new life in the country, she finds that their old farmhouse holds some surprises — like a ghost in her room! Melissa's efforts to lay the ghost to rest lead her to make new friends and exciting discoveries. Good for readers of nine to thirteen years.



THE OCTOBER CHILD — Eleanor Spence. Soft cover, 151 pp, Aust. RRP \$5.95.

This is a very moving account of how one family copes with the knowledge that their baby is 'different' — autistic. The story focuses on Douglas, ten when the new baby arrives, and through his sensitive eyes we see how the other members of the family deal with the anxiety, resentment and love aroused by this 'problem' child. A wonderfully poignant story for older children.

SNAKES AND LADDERS — Robin Klein. Soft cover, 77 pp, Aust. RRP \$6.95.

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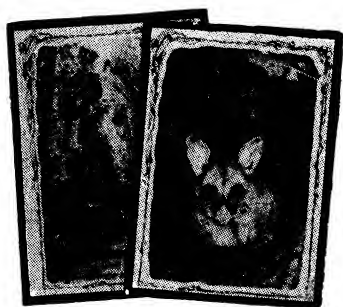
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GAME BIRDS

Choosing a Species for Backyard Production

by Megg Miller, Shepparton, Vic.

Game birds are the Cinderellas of the poultry yard and although much interest is shown in them, most people confess to knowing little about their individual needs and differences. They may rush into keeping them, suffer substantial losses and then write them off as 'hard to keep'. Game birds are not hard to keep, just different from the domestic fowl. The term 'game bird' usually refers to those species of poultry other than fowls and waterfowl that are kept primarily for the table. Confusion does arise however because there are a number of game breeds of fowl, but with the exception of the Indian Game, these were bred for cock fighting and not for meat. The group we will look at includes pheasants, partridge, quail Guinea fowl, squabs and the peafowl which whilst not consumed today was a banquet bird in earlier times. We'll also briefly cover turkeys although they have been discussed in depth in earlier issues.

General Information

Select breeding stock with correct conformation that are genetically capable of reproducing stock similar to themselves. Body weight is usually highly heritable so don't buy narrow, small birds and hope to grow out giants. Egg production is also an important consideration and stock should be selected for this ability. Keep in mind too that the number of eggs per season will vary between strains of a species. Laying early or late also depends on the particular strain as well as factors like age of hen, weather conditions, management system, feeding and general husbandry. Early laying hens are usually considered more desirable.

The males of most game birds are very aggressive so if they are to be run together in the breeding season they should be kept together for several weeks prior to it. If separate pens are kept, hessian may have to be attached to internal fences to prevent fighting. Be wary of mixing species too as you may find the larger one kills the smaller.

Most breeding stock will be offered for sale as off heat (just feathered) or adults — it is not common to buy day old chicks. Find out beforehand the recommended ratio and try to buy accordingly as the males of some species are sexually jealous and will knock the hens around badly if not kept in the recommended ratio.

Be prepared to feed breeding stock with rations specifically supplemented to aid fertility and hatchability. Generally turkey rations suit for all game birds. During the non-breeding season, the birds can be maintained on a simple grain diet.

It is important to read as much as possible about the traits and requirements of the species you're interested in, and try and talk with people who have kept them — they will be able to fill in where the books left out.

Pheasants

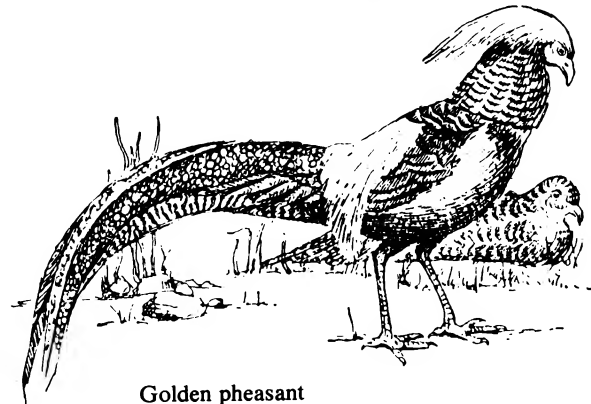
Pheasants originated in Asia but from very early times they were carried by seamen to other parts of the world where they quickly became established. In fact so well established did



Reeve's pheasant



English Ringneck pheasant



Golden pheasant

they become in countries like England where they were released to roam free that few people realise that they are not a native bird. Unfortunately there was no similar early release of them in Australia so numbers have been small and the limited stock available forms a close genetic pool.

There are two distinct groups of pheasants. Ornamentals which like the Silver, Golden, Reeves and Lady Amherst varieties, are kept as aviary birds for their colourful plumage, and game varieties, as in the True or Ringneck type, grown primarily for the table. This variety is the oldest and most well known of all pheasants. Game varieties include the Chinese Ringneck which is the most popular, the Mongolian, Blackneck, Mutant and crosses of these. In all varieties, the male is brightly coloured with a long distinct, attractive tail whilst the female is a smaller bird, shorter tailed and plain coloured with relatively insignificant markings.

Although pheasants have been kept in captivity for centuries they are one of the least domesticated of all game-fowl. The pheasant is still a wild bird, and to keep them successfully, management should be directed towards controlling their ability to fly and their tendency towards cannibalism.

Pheasants are able to fly at 2-3 weeks of age and fly they will if given the opportunity. Should the door to their pen or shed accidentally open they will take off despite having lived there all their life and being relatively quiet. Even whilst

shedded intensively this basic urge will come to the fore if they are disturbed or frightened — birds will panic and fly upwards, often fracturing heads or necks on the roof if it's not made of pliable material. For this reason most pheasants kept under commercial conditions are pinioned as day olds although where smaller numbers are kept, wing feathers may be clipped each month. If pinioning is decided upon professional help should be sought because if done incorrectly the cock birds may have trouble balancing whilst mating. However, backyard producers bypass this practice by keeping pheasants on range that is fenced and covered in with netting.

Yards or pens should be 2 m high with either wire netting or sheets of iron buried 0.5 m in the ground to prevent the entry of foxes.

Iron is more effective because it can be carried above ground level to a height of about 0.5 m and used to block the birds' vision. This minimises panic should domestic pets appear and discourages the notorious habit the birds have of relentlessly pacing up and down. If using wire netting to cover runs, it should be strung loosely however, there are now some new pliable, lightweight plastic nettings which are excellent for this purpose. Tightly strung netting can result in head injuries if the birds suddenly take fright. Their yard should contain established natural grass and small bushes and shrubs to enable the birds to escape from bullies and highly sexed cock birds. If there is no established ground cover, tree branches and bundles of dried grass can be set up to imitate a natural setting. It is also wise to provide several small lean-tos or open sheds for shelter from wind and to encourage hens to lay in a central spot rather than randomly as they so often do. Perches in the shelters help to relieve boredom as well as giving hens another refuge from pursuing cock birds. If crows and hawks are a problem (even though they cannot get into the yard) provide a screen by carefully covering the top of the netting with a number of well leaved branches. Commercially, pheasants are kept in keep litter sheds so it is certainly possible to raise them this way if you wish but they will need debeaking regularly (the beak grows quickly) or fitting with plastic spectacles to prevent cannibalism.

Cannibalism in the flock is a major problem to pheasant breeders and although the cause of it is not fully understood it appears to be initiated by overcrowding as chicks and then becomes a habit aggravated by boredom. To minimise the problem, allow plenty of room for brooding and growing chicks, feed a balanced ration high in protein, salt and fibre, hang bundles of grass or straw for bored birds to pick at, provide perches in sheds or outdoor shelters and ensure there is an abundance of ground cover for those running on the range. Picked birds should be removed, treated if necessary and separately housed until wounds are healed.

Cock birds are very aggressive, especially during the breeding season and for that reason many people only keep small breeding pens, the normal ratio being 1:7. Community yards can be successfully managed, producers should allow adequate room (2 sq m per bird), ensure there is sufficient ground cover and shelters and be prepared to collect eggs several times daily because of possible breakages from fighting. Hens commence laying in their first year, peak in the second and should be culled following the third season. They

lay between 40-50 eggs per season (October through to January) but this can be increased by selecting for laying ability. The productive life of the cock is three to four years. Fertility is generally good for the first couple of months then drops off markedly so birds need to be settled in and on a breeder ration well before October. Eggs take 23-28 days to hatch, depending on the variety of pheasant and freshness of eggs when set. Keep breeding eggs for no longer than ten days. Hens are not prone to broodiness nor do they make good mothers, so it is customary to set eggs either under bantams or incubate artificially. Beginners would be advised to use bantams as artificial incubation of pheasants is quite touchy and hatchability is not high at the best of times. To increase hatchability, ensure breeding stock is fed either a breeder ration or a vitamin/mineral supplement and that setting eggs are fresh and have been stored in a cool spot and turned twice daily.

Pheasants' nutritional requirements are similar to those of turkeys and can be fed their ration successfully. This is particularly important in the chick and grower stage because, like turkeys, pheasants are susceptible to Blackhead and Coccidiosis and rations can be purchased with preventative medication in them. Coccidiosis usually only strikes when birds are overcrowded and floor litter is damp, so with proper management it can be prevented. Fowls, including bantams can be carriers of Blackhead so it is more difficult to control. Worm hens regularly and if you are not using a proprietary feed use either Emtryl Soluble (made by May and Baker) in the water or consult your vet for a suitable preventative. *Turkey Keeping* in GR 45 and 46 provides information on natural disease control.

If breeding for the table, more specific information can be obtained from your Dept. of Agriculture or Primary Industries regarding processing and marketing.

When catching pheasants, remember that they have quite brittle bones, so rough handling and catching may result in breaks. A net similar to those used for fishing or yabbing but containing a strong mesh can be placed over the bird and gently pulled towards you. Hold the bird by both legs and lay it along your arm so its head and shoulders are held firm between your arm and body. This keeps the bird immobilised.

Further Reading

Pheasant Farming, David Miller, GR 17, P. 12.

Next issue we will discuss quail, partridge and peafowl.

Handy Hint

Nails and screws go in more easily if their tips are kept in grease such as pure beeswax polish, petroleum jelly or even butter. A loose screw can often be tightened simply by glueing a wooden matchstick into the hole and screwing the screw back again.

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AGROFORESTRY UPDATE

by Irene Maxwell, Woodend, Victoria.

We have set ourselves quite a task here at Woodend, but it's only difficult because we have to build a house at the same time as do all the agricultural things we're interested in — that indeed makes it hard! If it becomes 'too much', it will be because of building, not the planting and growing, which is totally engrossing and thoroughly rewarding!

We thought about protection for the trees and know there are tree guards quite cheaply available (or do-it-yourself along the same principle) which are reputed to not only deter hares/rabbits, but encourage good growth — they're called *Grotubes*, I think. But our philosophy, as part of the organic living business, is to plant out a wide variety of trees and shrubs, and see which survive and thrive and which suffer, using the concept that 'molly coddling' the sufferers will not, in the long term, be effective.

Of our initial plantings (which include river reds, melaleucas, banksias, boobialla, pittosporums, acacias, and many others) the only victims to hares have been the *Banksia marginata* (silver banksia, a coastal species) and a sorry-looking pittosporum. So, since most of the others are fine, we simply won't replant with silver banksia — we'll try something else.

It's been a difficult time to plant out, we've had floods here and all our young trees have been up to their armpits in water. I'm amazed at their progress, particularly the wonderful river red gums. At all times though we believe that the fitter and stronger the plant, the better able it is to grow and thrive and deter marauders, both bug and otherwise. This is quite obvious when you go into a chunk of bush, and see the untouched seedlings growing everywhere. When we lived in the middle of bushland in Healesville, our fruit and nut trees and vegie garden were never touched by the possums, wombats and wallabies that abounded there. And yet friends of ours nearby on a steep, degraded block of scrubby regrowth lost fruit trees to possums — could it have been that the depleted soil undermined the trees, or that their pampered

lushness amongst the otherwise stony, scrubby land was like a McDonalds in the wilderness? In such a case, some decoy native seed or fruit bearing trees or shrubs might help to deflect interest from fruit trees, if one is able to grow fruit trees in such an environment.

Anyway, the idea is to experiment and plant a whole range of trees to see how they come along (with due research to maximise your chances of selecting suitable species for the area) and don't replant failures with the same species. Try something else. There's so many to choose from! To replace our silver banksias, for instance, we might try some callistemons, they'll fulfill the same function as the banksia, but maybe they won't mind the heavy soil so much.

When we finally get around to planting out the first fruits, nuts and vines, there will have been a year's site preparation first, including drainage works and building soil fertility and structure. The basic soil here is excellent, but these 'exotic' growers (anything bearing lush, edible crops) require so much more from soil. As well, we'll have decoy trees, ones not specifically growing for ourselves or sale but rather as 'offerings' if you like (always a good idea!). You don't need many, ask relatives for a present of a fruit tree for Christmas for instance and plant them out ornamentally rather than in the orchard/vine area, say along the drive or along a fence-line, and let the birds go for it! As well, I firmly believe in intercropping small, hardy flowering shrubs (native) amongst all crop areas, including vegie garden and cut flower garden, whatever the pursuit. They'll provide protection to the crop and encourage wonderful insect-eating birds as well as sending their roots down deeper than annuals.

Before finishing up I just want to say how pleased I am with my hand weeding program. There's been a remarkable decrease in thistle here since we began in autumn. I use a 'jemmy', believe it or not. It's perfect, the curved end does the trick every time!

GROWING TREES FROM SEED

To grow your own trees from seed is very satisfying and the rewards are great. Of course, it is a much longer term project than say, planting a radish seed, so it is worth taking care at the beginning. Relative to vegetable seed, tree seed often takes longer to germinate and sometimes the germination rate is lower. This need pose no problem provided it is understood and allowed for.

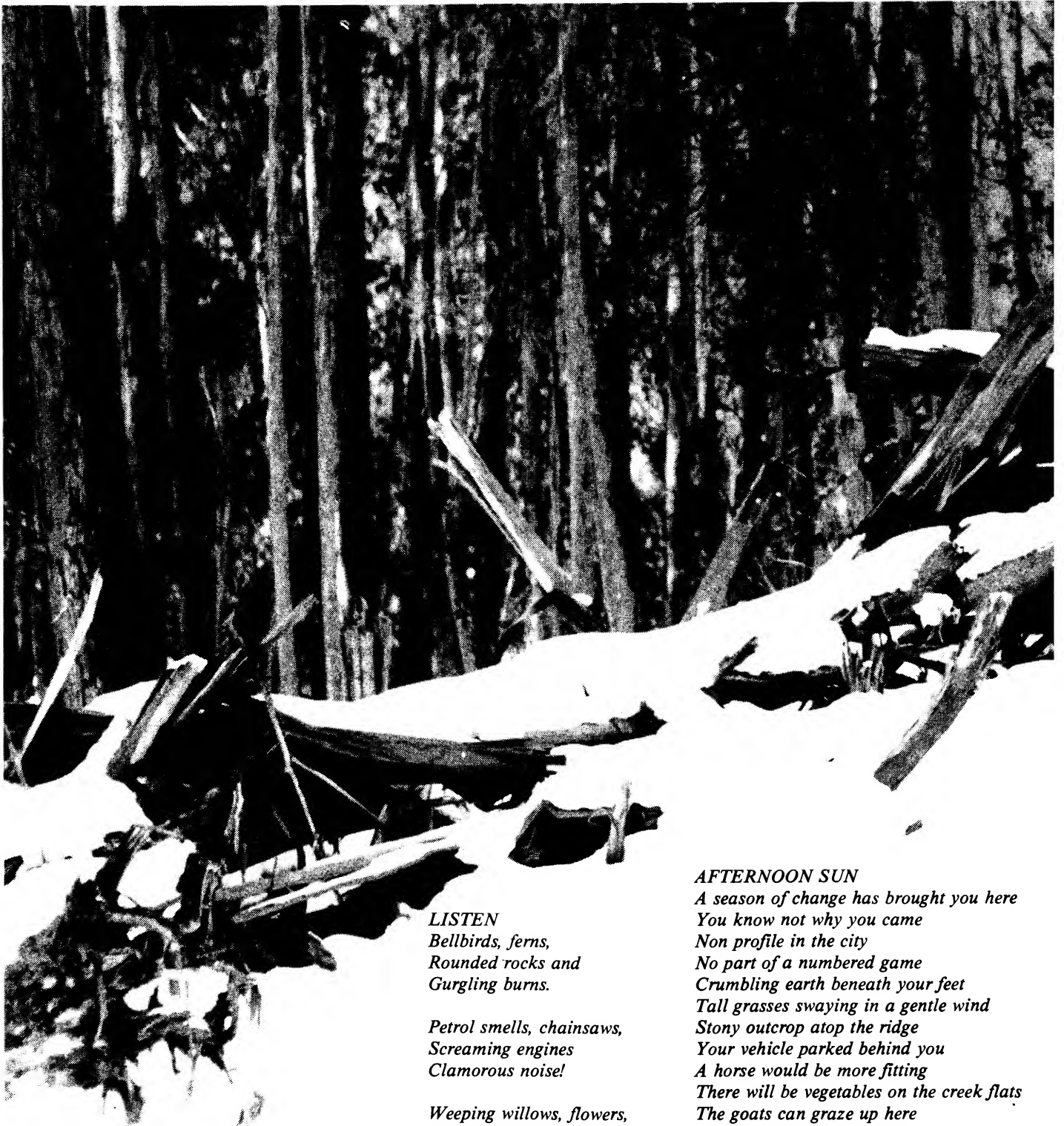
Seed from trees native to cold winters usually requires cold stratification. Normally, the seed would lie on the ground through winter before germinating in early spring. To duplicate this, you can sow the seed in pots or beds outside in autumn (if you are in a temperate area) and mulch well. Remove mulch in early spring. Alternatively, the seed can be stored in damp, not wet, peat moss or vermiculite in a jar or plastic bag, sealed, labelled and stored in the refrigerator at 1-4.5° C (34-40° F) for 30-90 days (this varies with different seeds). Check occasionally for drying out of peat moss and stir the seed for aeration. Take from the fridge in early spring

and sow immediately.

Seeds with hard coats often need to be scarified. This means allowing moisture to enter the seed by nicking, chipping or filing the seed coat opposite where the seed was attached to the plant. Sandpaper can be used for smaller seeds. Be careful not to damage the embryo. For some seeds e.g. acacias, honey locust, the hot water treatment is useful. Put seeds in a container and pour about 5 times their volume of boiling water over them and leave for a day.

The time taken to germinate in the soil can vary enormously — usually allow 6-8 weeks. It may be months or longer before all seedlings have emerged. Lindens may have a 25 percent emergence in the first year and the rest over the next two years. Pines generally emerge over a period of 10-50 days, though some may remain dormant for longer.

Reprinted from the 1986/1987 *Phoenix Seeds Catalogue*. Free copies of this catalogue can be obtained from Phoenix Seeds, PO Box 9 Stanley 7331.



*Please remember, when we are apart,
You share the sheltered corners of my heart.*

*My joys are yours, your pain is mine,
Fair weather for you, for me it's fine.*

*Nothing can part the sharing heart,
Not time, nor distance, or lives apart.*

Helen Denman, Alice Springs, NT.

LISTEN

*Bellbirds, ferns,
Rounded rocks and
Gurgling burns.*

*Petrol smells, chainsaws,
Screaming engines
Clamorous noise!*

*Weeping willows, flowers,
Wattles and gums —
Plastic bags, tin cans,
Papers and guns.*

*Furry kangas, possums,
Wombats and birds —
Trail bikes, radios,
Your rubbish left here
And the bush disturbed!*

Michelle Fogarty.

AFTERNOON SUN

*A season of change has brought you here
You know not why you came
Non profile in the city
No part of a numbered game
Crumbling earth beneath your feet
Tall grasses swaying in a gentle wind
Stony outcrop atop the ridge
Your vehicle parked behind you
A horse would be more fitting
There will be vegetables on the creek flats
The goats can graze up here
An orchard between the two
The house can go over there
A pump station beside your creek
No need for a windmill here
You take a shovel from the tray
Take a seedling as well
The first tree will go in here
You know it will enjoy the scene
As well as you do*

Stephen R. Pope.



ROOS AT DAYBREAK

*Gathered amongst the dawn-flecked gums,
grey ghosts
this hour is yours to haunt.
I have dreamily stumbled in
and found you balanced upon
the rim of sound.
Mischievous children
could I ever learn your silence?
Your noses twitch in vague danger
will you hoist your ears
and vanish
you shadows of a once dreaming land?*

David Cole.

*I meet him on the lawn,
Bunched black and white feathers
Still ruffled from night time's nest.
Black, beady eyes regard me with trust.
He hops a welcome.
Behind him, on the fence,
His mate casts shy head-on-side glances
With a confidence borne of perched security.
I give them seed from a plastic bag,
Then later hear their gratitude sung
In sweet, clear notes from the cypress tree.*

Carole Williams.

HORIZON'S END

*Blue gums bleaching
In relentless sun.
New tones reaching
Loud cicadas hum.
Smoke drifts crazy,
Lone distant fire.
Life is plain lazy
With no desire
To hurry or such.
Beyond city's clutch
Magpies and another birds
Are the only other sounds heard.
Ants race quickly
In the scrub thickly.
Ground is poor, so little to give,
How on earth do you live
In horizon's end
Without even a friend?*

Mary Miller.

THAT GOLDEN TOUCH

*Yellow glow, dull yet bright
Shouts or murmers with the sight
Feels of velvet
Cold as stone
Stirs new senses as yet unknown.
Reason lost, ambition gained
no thought of pain to come
To these hands which hold with care
the yellow glowing power of gold.*

W. Armstrong.

SIMPLY SEEING

*Silky rain
On green hills and grey
Where sun, sheathed rainbows
Sway and fade.*

*By Lost Lemon Creek
The warm wood creams
And nothing stays endlessly
Just as it seems . . .*

*One hut – then another
A woman with child –
A man with a pipe
Opposes the wild.*

*The wild flakes like bark
Dark people stare
And flicker and fade
And rain fills the air.*

*Softly come tears
In our blue eyes and grey
For the souls of the past
As they wind on their way . . .*

*Through the warm woods creaming
And the silky rain,
Through the rainbow glowing
And the gentle pain.*

Tom Hayllar.

KIDS PAGES



Dear GR Kids,

I'm back at school again now but I had a lovely holiday and hope you did too. It was nice being home doing things like weeding my garden (and putting wire netting around some of it to stop Megg's chooks scratching) having my two good friends to stay, visiting both lots of Grandparents, reading, making oodles of popcorn and stuff like that. I also helped Megg each night feed and lock up the birds.

It was a beaut term at boarding school, the best things being chairperson in a debate and acting in a school play for two nights, as a mother. It was nerve-wracking and my feet killed me from wearing high heels. Back at the boarding house my roommates and I rearranged our room (again) to make it more enjoyable, fun, comfy and altogether better. Luckily we have a heater in our room so it becomes warm and snug and our house 'mother' turns it on to warm up the room before we get home from school. Spoilt.

I joined the table tennis team with my friends Anna and Bethany this term and we practice after school. I'm having fun but I still think longingly of home with its open fire, Megg's soup, David's scones and best of all my bed and hot water bottle. Some nights when I had sneaked the cats in I couldn't work out which was a hottie and which a cat.

Hope you all had a nice holiday and are enjoying your pets.

Sunshine Miller.

Dear Sunshine,

My name is Belinda Evans. I am 10 years of age. My hobbies are collecting dogs, bike-riding, reading and art.

I read *Grass Roots* a lot, and so does mum and dad.

I go to Gulgong Public School. Not long ago we got a dam built. I saw you and your friend Kerry on the front cover of *Grass Roots* No. 57. On the 24th of October 1986 I went on an excursion to Dubbo Zoo.

Well, better go now.

**Lot 16 Suzanne Rd
VIA GULGONG 2852.**

Dear Kids Pages,

I am 11 years old and really like *Grass Roots* and the Kids Pages. Sometimes I look through the back copies and make things from them. We live on a farm and when it is wet and too muddy to muck about outside I do the Kids Pages. I like reading too and have just read one of the *Billabong* books. I also like Judy Blume.

**Jenny Kern
BEGA 2550.**

COOKERY CORNER

Mum's Peanut Bikkies



4 oz margarine or butter

¼ cup raw sugar

1 tbsp milk

1 dtsp golden syrup

½ tsp Bi-carb soda

1 cup unsalted peanuts (or sultanas etc.)

½ cup wholemeal flour



Melt butter, sugar, milk, syrup and soda in pan. When cool, add flour and nuts. Roll into walnut-sized balls. Put on baking tray and press down with a fork (dipped in flour to prevent sticking). Cook at 350°-400°F for about 12 mins. They harden when cooled, and are lovely.



Marg, Donald, Vic.

GROWING

Rebecca Edwards (aged 12), Castlemaine, Vic.

Nature has always fascinated me. I love watching things grow, whether they be plants or animals. This story starts with me walking along one of my favourite bush tracks.

It was the beginning of spring and I was watching out for magpies. I suddenly spotted a nest just low enough for me to peek into. In the nest was a solitary white egg. The beauty of this single egg, unprotected for now, rushed through me like an electric current — I could almost see a chick inside. I heard a rush of wings and looked up, I had been seen! I ran stumbling with my hands over my head, but I knew with those wonderful wings the magpie was only watching me, its head on one side as if sensing that I loved its egg almost as much as it did. Suddenly the magpie flew toward me. I controlled myself knowing that if I ran I would wreck the bird's trust. The bird gently touched me on the head and flew towards the nest, I followed behind. For about an hour the bird and I communicated somehow, first looking at the egg and then at each other. Then I left, telling the magpie I would return, hoping it understood.

And I did return, just about every day and each time the magpie greeted me. I arrived one day to a very excited magpie rushing straight off to its nest. I ran after it expecting disaster . . . but of course it was just the opposite, for there lay not an egg but a tiny chick, squawking for food as all chicks do. Its mother rushed off. I stood transfixed looking at the little wonder, hardly believing it had come from the egg I was so used to seeing. Its mother soon returned and fed it.

As the chick grew, I could just about see it getting bigger every-day. It grew and grew. Standing on the edge of its nest flapping its wings it would get a few inches and fall down. This it continually did getting slightly further every time. I arrived one day, looked into the nest and it was empty. I heard a squawking and looked up, there sitting on a branch high above me sat the chick and its mother, only it wasn't a chick anymore it was a fledgling. Its mother flew down to greet me and it soon followed.

The nest was discarded and the two birds slept high up in trees. Then one day the mother came home without it, bringing instead a mate. I found the little one with a mate too. I now had four magpies and I was sure there would be more.

What would happen if pigs could fly?

Bacon would go up.



Have you seen a dog make a rabbit hutch?

No, but I've seen a fox make a chicken run.

MAKE A POT STAND

By Barbara McNabb, Seymour, Vic.

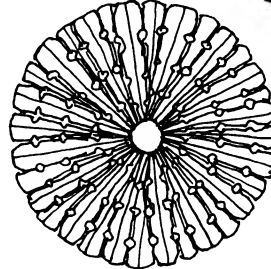
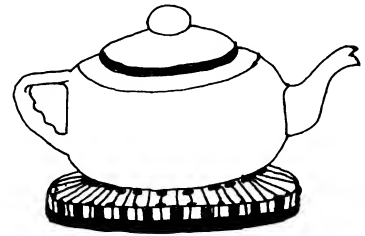
You will need a scrap of leather, vinyl or felt cut in a circle
15 cm (6 in) in diameter
40 wooden spring pegs
1 tube of handy grip (Selley's)

Remove metal spring from pegs and glue the two remaining wooden pieces back to back. Repeat with all the pegs. Let dry.

In the centre of the circle of leather draw a small circle the size of a 20 cent piece. Arrange around the circle, 20 of the pegs with the narrow end inwards and radiating outwards. Glue to the leather and each other on the sides. Let dry.

With the remaining pegs, place the narrow end into the space between the pegs and glue.

Finish with a coat of varnish or woodstain. There are ready-made holes to hang it on the wall.



LEARN ABOUT AUSTRALIA

Two entertaining and educational activity books for children were recently published for the National Parks and Wildlife Service of NSW. Titled *Deserts and Woodlands and Forests* they talk about Australia's unique and wonderful wildlife and the habitat in which they live. They contain lots of games, puzzles, colour-ins and pages for drawing to help children understand and appreciate our environment. The illustrations are realistic and of exceptional quality — and obviously Australian. The books would be ideal for classroom work, for later primary age students to work on alone and for family reading and talking with the littlies. Price is \$2.80 per book posted from Night Owl Publishers.

Many types of animals live in the woodlands.
Can you find the ones in this puzzle?



ANT
BETTONG
COCKATOO
CURLEW
DOVE
DRAGON
DRONGO
DUNNART
FROG
GOANNA
HONEYEATER

KITE
KOOKABURRA
NUMBAT
OWL
PIGEON
RAT
ROSELLA
SKINK
TOAD
WREN

Pond Life

*A pond is like a little town,
with creatures everywhere,
that live and love, and love and live,
all seeming not to care.
The mozzie larvae and the frogs,
live with all the taddies,
with fish and worms, and little blobs,
and mommies, babes, and daddies.
The yabbies come and eat the tads,
while others look on in doubt,
and this, my friend, is not the end,
but what life is about.
The birds swoop down and snatch the fish,
the tadpoles and the worms,
who can't do things to save themselves,
but wriggles, turns, and squirms.
Now these might seem like nasty thoughts
to live with day by day,
but what, I wonder can be done,
when they can't get away?*

Wanda L. Wright Maryborough 3465.

T	H	O	N	E	Y	E	A	T	E	R
D	R	O	N	G	O	A	N	N	A	E
K	O	O	K	A	B	U	R	R	A	T
A	C	U	R	L	E	W	R	E	N	O
D	U	N	N	A	R	T	O	A	D	P
A	C	O	C	K	A	T	O	O	W	L
P	A	S	K	I	N	K	I	T	E	E
D	R	A	G	O	N	U	M	B	A	T
R	O	S	E	L	L	A	N	T	C	A
D	O	V	E	A	P	I	G	E	O	N
B	E	T	T	O	N	G	F	R	O	G

From *Deserts and Woodlands Activity Book*.



While the Billy Boils.....

How often does the question 'What's for tea?' get asked in your household? Whether you plan your meals in advance or look in the pantry for inspiration at the last minute, we have chosen a few delicious recipes to tempt appetites and keep bodies warm and satisfied whilst the weather is cold.

Lentil Soup

- 1 cup red lentils
- 1 medium carrot, onion and turnip
- 2 sticks celery
- 1 tbsp margarine/butter
- 1 tsp dried mixed herbs
- salt and pepper
- 1 1/4 lt chicken stock
- 1 bay leaf
- freshly chopped parsley to garnish

Wash and drain the lentils. Peel and chop the vegetables. Melt the margarine/butter in a large pot and gently saute the vegetables for five minutes. Add the drained lentils, stock, seasoning and herbs. Bring to the boil, then simmer gently until soup has thickened, about 40 minutes. Remove the bay leaf and serve garnished with parsley.

Lorna Brown, Ardmona.

Vegetable Patties

- 1 cup mashed potatoes
- 1 cup cooked mashed carrots
- 1/2 cup cooked shredded silverbeet
- 1 egg yolk
- 1/2 cup snipped parsley
- 2 tbsp fine, dry breadcrumbs
- 2 tbsp butter
- 1/4 cup grated Parmesan cheese
- flour
- salad oil

Mix thoroughly all vegetables, butter, cheese and breadcrumbs with the egg yolk. Shape into patties and dust lightly with flour. Saute in small amount of oil over a medium heat until browned on both sides.

Anna Nissa, Bankstown.

Anna's Herb Bread

- 500 g (18 oz) unbleached white flour
- 250 g (9 oz) stoneground wholemeal flour
- 100 g (4 oz) rye flour
- 1 tsp chopped fresh marjoram
- 1 tbsp crushed coriander seeds
- 1 tsp chopped fresh rosemary
- 25 g (1 oz) yeast
- 1/2 tsp salt
- 1 3/4 cups warm water

Blend the flours well with herbs and seeds. Cream the yeast with a little of the water. Dissolve the salt in the remaining water. Make a well in the flour and add the liquids mixing well with a wooden spoon. Knead the dough for 3 minutes. Cover and leave in a warm spot to rise. Knead lightly and shape into an oiled bread tin, cover and let rise again. Gently prick the loaf several times through its depth with a skewer. Bake at 220° C (424° F) for 40 minutes.

Anna Nissa, Bankstown.

Pumpkin Pie

Pastry shell:

- 125 g (4 oz) butter
- 1 egg yolk
- 2 cups wholemeal flour
- pinch salt
- 1 tsp baking powder
- 3 tbsp sugar
- 1 tbsp water
- 1/2 tsp vanilla

Cream butter and sugar, add egg yolk, water and vanilla and beat well. Sift flour, baking powder and salt and add to mixture, making a medium dough. Knead until smooth, roll out and use to line a pie dish. Prick the base with a fork.

- 1 1/2 cups cooked mashed pumpkin
- 1 cup boiling milk
- 1/2 cup raw sugar
- 1 tsp cinnamon
- 1/2 tsp nutmeg
- 1 egg
- 1/2 tsp lemon juice

Mix pumpkin, milk, sugar, salt and spices, then add beaten egg and lemon juice. Combine thoroughly, place mixture into lined pie dish and bake in a moderate to hot oven until pastry is cooked.

Lynn Smith, Dalby.



Banana and Muesli Loaf

- 2 cups SR wholemeal flour
- 1/2 cup raw sugar
- 180 g (6 oz) softened butter
- 3 very ripe mashed bananas
- 2 eggs
- 1 tsp bicarbonate of soda
- 1 tsp salt
- 1/2 cup milk
- 2 tsp lemon juice
- 1 cup natural muesli
- 1/3 cup chopped nuts

Put lemon juice into milk and let stand for 5 minutes. Into a large bowl combine flour, sugar, butter, soda, salt and bananas. Beat in eggs one at a time then stir in milk and muesli and nuts. Mix thoroughly. Place in greased tin and cook at 180° C (350° F) for 45 minutes.

W.A. Morrow, Nulkaba.

POLENTA

by Maria Gallo, Darlinghurst, NSW.

Although polenta is relatively unknown on the Australian dinner table it is warming winter fare in northern Italy and central Europe. Polenta is to these people what porridge is to the Scots — hearty high energy food that heats the body and helps a person endure life in a bitterly cold climate. To me, the mere mention of it takes me back to childhood and to my patient mother stirring and stirring the cornmeal mixture. Because it was so tedious to make it wasn't an everyday food, rather my mother made it on Sundays when she had more time to spare and as a special treat at Easter. I have to confess though that what I enjoyed most about it was patting the skin that formed on it as it cooled — although I always got into awful trouble for this.

Polenta is quite tasteless and it is the sauce that accompanies it that makes it a favourite. We often had a sauce based around onions, garlic and tomatoes and the cold left over polenta would be fried in oil or butter and served with vegies or this sauce. We never had bread when we had polenta, so it could be said it was used in place of bread.

Before going onto the recipes I'd like to mention 'Baccala', our Easter treat. A long piece of dried fish was bought and soaked for 24 hours. The water was changed several times because this fish had been salted. Then it was beaten with a hard object like a rolling pin to soften it and then boiled quickly for 5 minutes. Any longer and it would become tough. The bones were removed and it was made into a fish stew with garlic and tomatoes and served with the warm polenta. Delicious!

Recipes

The basic polenta preparation produces a rounded, moist loaf. Easy to prepare, with a unique flavour and appealing texture, polenta lends itself to experimentation.

BASIC METHOD FOR MAKING POLENTA

4¾ cups water

1½ cups cornmeal

Bring the water to a boil in a medium-size heavy saucepan. Turn the heat down to medium-low so that the water is just simmering. Add the cornmeal in a very thin stream, stirring constantly with a whisk or wooden spoon. Continue stirring for 20 minutes or until the polenta thickens and pulls away from the sides of the pan as you stir.

Polenta is traditionally poured onto a large wooden board (a big bread-board) and allowed to cool slightly before slicing and serving. But you may spoon it directly into bowls. Cover with sauce as you would for pasta.

CALZAGATTA

1 quantity polenta (as above)

1 cup dried kidney beans or 2½ cups canned

2 to 4 cups water

3 cloves garlic, minced

2 to 3 tablespoons olive oil

1 onion, chopped

1 green pepper, chopped

1 medium carrot, chopped

1 stalk celery, chopped

1 bay leaf, fresh herbs (parsley, thyme, basil)

grated parmesan or cheese of your choice.

Soak the beans overnight or for at least 4 hours. Discard soaking water and add fresh water to the beans. Bring beans and water to the boil and then cook over medium heat for 45 minutes. Reserve 2 cups of cooking water. Sauté the garlic in olive oil. Add onion, green pepper, carrot, celery and tomatoes and sauté a few minutes. Add the beans, 1 cup of reserved liquid (or water if using canned beans), bay leaf and herbs and bring to the boil. Simmer slowly 30 minutes, adding more reserved liquid or water if necessary, until the beans crush easily against the side of the pot. With cooked beans, the process will not take long, so make sure the beans don't get too mushy. This mixture can be set aside while you make the polenta. Slice the polenta into 1 cm (½ in) slices, or spoon into a buttered 20 x 20 cm (8 x 8 in) square pan and top with the bean mixture, grated cheese and a generous sprinkling of parsley. Serve with a green salad or steamed vegetables.

If you are using leftover polenta, slice and place in a baking dish. Cover with the beans and sprinkle with grated mozzarella cheese. Bake at 190°C (375°F) until the cheese is melted and the polenta is heated through.

TOMATO AND CHEESE POLENTA

1 quantity polenta (as above)

3 tablespoons olive oil

3 cloves garlic, chopped

2 medium onions, chopped

1 green pepper, chopped

3 cups plum tomatoes, chopped

¾ cup parsley, chopped

red pepper or black pepper to taste

450 g (1 lb) mozzarella cheese, sliced thinly

grated parmesan cheese

parsley, chopped

In olive oil, sauté the garlic, onions and green pepper in a large saucepan until limp. Add the chopped tomatoes and parsley. Season with red or black pepper. Simmer for about 15 minutes. Add leftover meat, fish or fowl if desired. Cut cold polenta into 1 cm (½ in) slices or pour fresh polenta directly into buttered 20 x 20 cm (8 x 8 in) baking dish. Cover the polenta with half of the sauce and half of the sliced mozzarella cheese. Then pour on the remaining sauce, and finish with the remaining cheese. Bake at 190°C (375°F) for 20 to 30 minutes or until cheese is browned. Serve with grated parmesan and chopped parsley.

QUICK POLENTA SANDWICHES

Slice leftover polenta into thick slabs. Slice a tomato and place on top of the polenta, cover with a favourite cheese and grill until the cheese is melted. Serve slightly cooled.

Perchance some readers are not familiar with cornmeal, it is yellow corn ground more coarsely than for flour and resulting in a gritty meal. Can be used in pastry, bread, cakes and biscuits in small quantities, giving them a heavy, crunchy texture.

Making a Bullock Harness

by Arthur Cannon, Kennington, Vic.

In the last two issues of GR we looked at how to select and raise a calf suitable for use as a work animal, characteristics necessary in the trainer, the whip, types of commands and when to use them and how to yoke up your bullock. So now you're inspired and want to start training your pet steer but cannot find a suitable yoke or harness? Read on and make your own.

You have a pet steer — one that overeats and leads a very lazy life. You feel that here is a source of energy going to waste, so you would like to train and harness the animal for jobs that are too heavy or time consuming to do by hand.

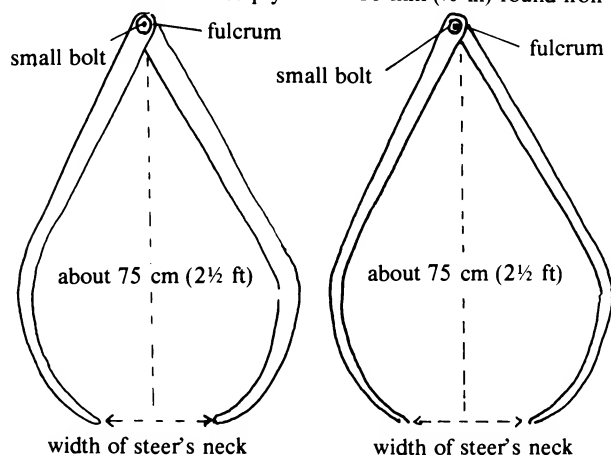
Training a steer should not be beyond a grass-roots handy person. However, the steer will not know what you want him to do, so you will have to introduce it to his mind. This takes time and patience.

The best breaking-in age is from 2 to 3 years, to which measurements this article applies. But age may vary a lot from the above, so measurements may be increased or decreased according to the age of your animal.

Making the Harness

With a pair of callipers (Fig. 1), measure the width of your steer across the neck near the shoulders. Use this measurement as a guide when you go to harness or to yoke him.

Fig. 1. Callipers thick three ply or 10 mm ($\frac{3}{8}$ in) round iron



Either a horse collar and hames, or a single-yoke and bow, may be used. With the former, do not worry if the internal measurement is too wide, unless you want the steer for pulling heavy loads. Then, to save his shoulders from becoming galled, he will need a close fit.

A steer's neck is wider at the top than at the bottom, so use the collar and hames upside down. Take the hames hooks off, turn them up the other way and re-fit them to opposite sides of the hames. Remove the reins rings and weld them back to the hames above the hooks (Fig. 2).

If you choose a single yoke and bow, make the bow about 12.5 mm ($\frac{1}{2}$ in) wider than the steer's neck, thus allowing for growth. Use 22 mm ($\frac{7}{8}$ in) round, mild-steel bar. Drill two 5 mm ($\frac{3}{16}$ in) holes 25 mm (1 in) apart, with the first hole 75 mm (3 in) from one end of the bar. Cut out the in-between metal with a blow torch, thereby making a key slot. (The key

Fig. 2. Horse collar

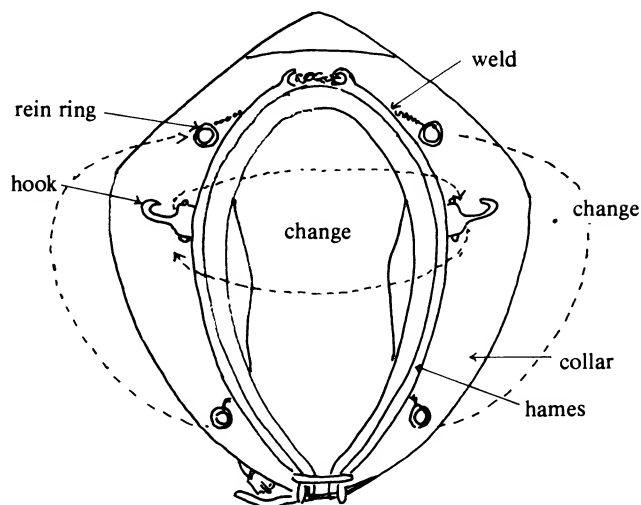
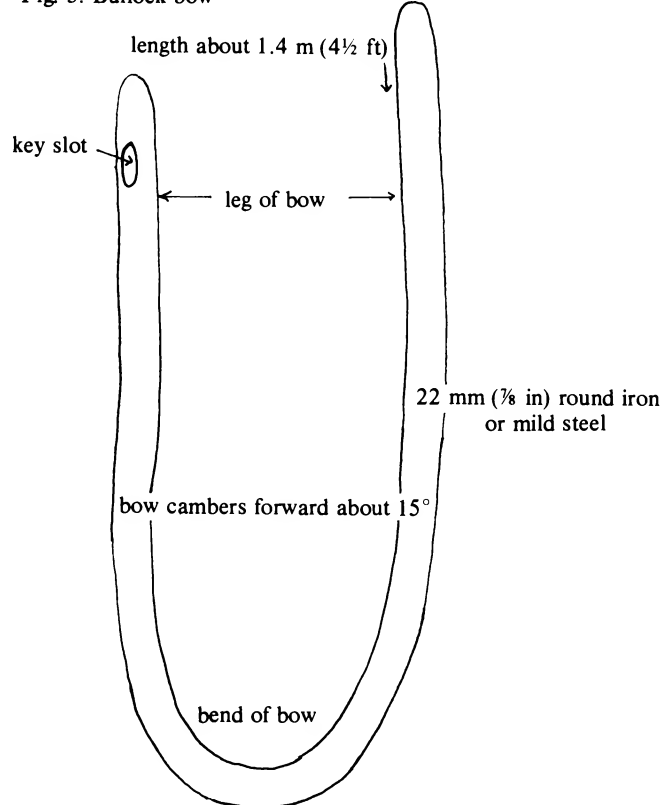


Fig. 3. Bullock bow

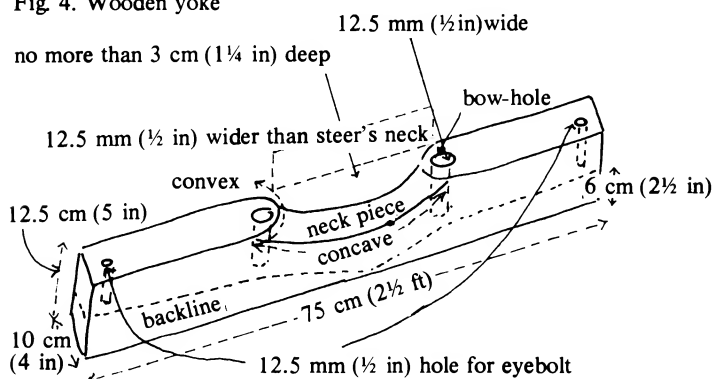


is necessary to hold the bow in the yoke.) Use a pipe bender to bend and camber the bow, or heat it red and bend on an anvil (Fig. 3). Shape the ends to blunt points.

Make the yoke from a straight-grained billet of wood, about 75 x 10 x 12.5 cm (30 x 4 x 5 in). Lay it on one of its 10cm sides. You will need an axe, adze, brace, 25mm (1 in) bit, 12.5 mm ($\frac{1}{2}$ in) bit, spokeshave, rasp, sandpaper and a glass scraper. Bore a vertical hole 5 cm (2 in) from each end, to take a 12.5 mm eye-bolt. Using the bow width as a measure, bore two 25 mm vertical holes, astride the centre of the yoke. These will be the bow-holes — the holes for the bow to go through the yoke. Using them as a guide, take a piece of charcoal and draw the outline of the yoke on one of the 12.5 cm sides of the billet.

First, draw the neck-piece. This is a concave arch between the two bow-holes. It fits over the steer's neck. It should be drawn no more than 3 cm ($1\frac{1}{4}$ in) deep and not come closer than 12.5 mm ($\frac{1}{2}$ in.) to the bow holes on either side. Cut out the wood to the depth of the charcoal line with the axe and the adze. Bevel and re-bevel the edges till there is a transverse, convex arch within the concave arch. Smooth it with the rasp, spokeshave and sandpaper. To finish, scrape it with the glass scraper. The neck piece must be made very smooth, or it will rub the steer's neck (Fig. 4).

Fig. 4. Wooden yoke



Turn the billet over and draw the top of the yoke. Beginning full depth at the centre, gradually reduce the charcoal line until it is 7.5 cm ($2\frac{1}{2}$ in) down at the ends. With axe and adze, proceed to cut the surplus wood from the top of the yoke.

Consider yourself lucky if the bow legs fit through the bow holes in the yoke. More likely, you will have to burn them through. Heat them to a cherry red and keep thrusting them back and forth through the holes until they fit freely.

Next, make or acquire an iron key, washer and toggles (as depicted in the detail, Fig. 5). Cut a number of toggles from 2.5 cm (1 in) diameter iron pipe, in lengths from 12.5 mm ($\frac{1}{2}$ in) to 50 mm (2 ins). In each case use the one most suitable. Push the eye bolts up through their holes in the yoke and secure them with nuts. Finally, staple a rein ring to each end of the yoke. The yoke is now finished (Fig. 5).

Whether you use collar or yoke, the rest of the rig is much the same. You will need two horse trace chains, one to go along each side of the steer. They are attached at the hook end to eye bolts in a swingle-tree, which, in turn, is attached to the implement you want to pull by an eye-bolt in the centre and a stout chain (Fig. 6). Chains and swingle-tree should be attached to the implement and left lying on the ground, awaiting the steer.

Fig. 5. Completed yoke

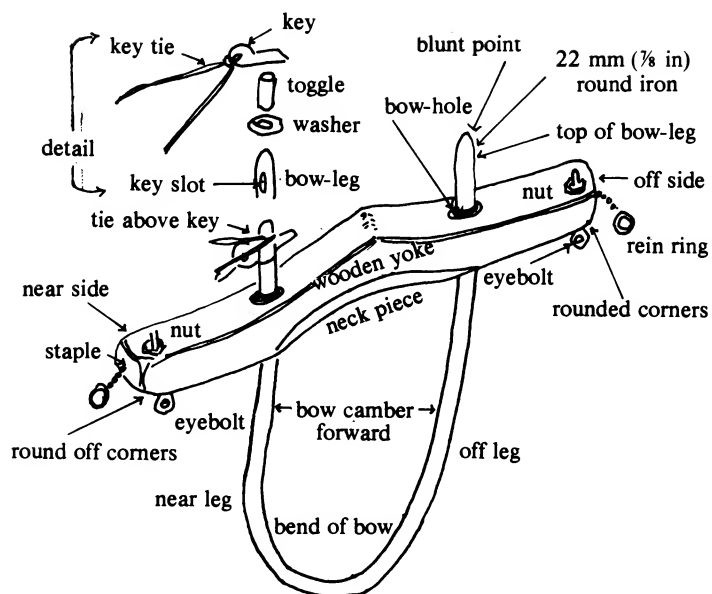
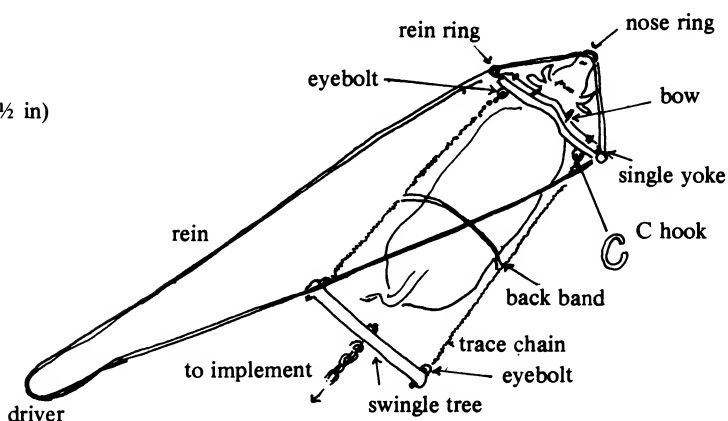


Fig. 6. Steer yoked with single yoke



Harnessing the Steer

Run him into the yard and tie him to the fence. To keep him calm, make all your movements slow and smooth. Talking softly, stroke him gently about the head and shoulders. Then, with a bow leg on each side of his neck, draw the bow up and pass the legs through their bow holes. Slip toggles over the slotted leg end of the bow. Adjust them so the bow will fit snugly around the steer's neck. Push the key into its slot and tie tightly with a leather thong above the key. Do not tie below, or the key will cut through the thong and come out of the bow, which will slip down and out of the yoke, releasing the steer.

For driving, you may use either reins or a whip. For a start, I would advise the former. Whip driving, in which reins are not used, needs the skill of a professional bullock driver, who usually has a team too large to be driven with reins. You will need horse winkers, or a bull ring in the steer's nose. The nose has to be pierced to accommodate the ring. Apparently this does not cause cattle much pain, because the ring goes through a skin-covered partition between the front and rear cartilage of the nose. (Feel inside your own nostrils and you



Bullocks working a wheat grinder at Nyerimitang National Park in Victoria. They are also used here for hay cutting and carting, hauling logs and putting up fences. Photo courtesy of Jan Crawford.

will find something similar.) Pierce this partition with a steel skewer, and the ring, sold (with instructions) by most veterinary stores, is then inserted into the nose.

If you use winkers, it is best to keep the bit out of the steer's mouth and leave it under his chin. Unlike a horse, a steer's tooth structure does not accept a bit so readily and, if left in his mouth, it will prevent him chewing his cud. But without a bit in his mouth you will find him very difficult to guide and will have to pull hard to get any response. However, if you accompany every action with an appropriate command, he will soon begin to understand what you want and become more tractable.

The reins are passed through the rein-rings and attached to the nose-ring or the winkers with spring-hooks. A back-band may be necessary to prevent the yoke or the collar twisting on the steer's neck (Fig. 6).

Lead in the steer and stand him between the chains. Attach the link end of the chains to the yoke by C hooks, or, if using a collar, the link ends will fit over the hames hooks. The steer is now yoked or harnessed to the implement (Fig. 6).

Training

When you want him to start, give him a slight flip on the rump with both reins and say, 'Get-up!'. For him to turn to the left, pull the left rein and say, 'Come-here!' To turn to the right, pull the right rein and say, 'Gee-off!' And to stop, pull both reins, saying, 'Whoa!' If commands are always delivered in an imperative tone, he will soon become wise and respond immediately. Both he and you will find a new kind of affinity.

But in the beginning, he will get into all sorts of tangles, and you will become absolutely frustrated trying to extricate him. You will have to exercise extreme patience and draw upon resources you did not know you had. You will learn as much from the steer as he does from you.

Regarding implements, I would strongly advise a sledge for a start. It is not likely to become damaged or to harm the steer. It is also cheap and easy to repair if it does happen to

become broken. Later you and your steer may graduate to a spring-cart or to a dray. But, to keep him in the shafts, horse harness, including cart saddle and breeching, will be necessary. At some time in the future, you may become adept enough to harness your steer in a gig, and drive to town.

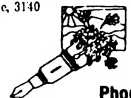
Arthur Cannon is the author of *The Bullock Driver's Handbook*, one of the few sources of information on this old craft. His ten years experience as a bullock driver has enabled him to combine a history of this fascinating way of life, together with how-to-do-it information that is practical and possible. An added bonus in the book is the chapter covering farm implements, drays, wagons and sledges providing would be drivers with ideas for either restoring or building their own. *The Bullock Driver's Handbook* is available from *Grass Roots* for \$15.50 posted.

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GROWING FIREWOOD

PART II

Last issue we looked at firewood from multi-purpose woodlots, firewood as a cash crop, growing, harvesting, expected yields, and the costs and returns involved.

Firewood Species List

The following list includes a selection of species suitable for firewood. The two species lists are based on rainfall above or below 600 mm. The concept of growing trees in periods of 'short rotation' in rainfall areas below their optimum minimum rainfall, necessitates harvesting before significant stress occurs.



Species suitable for areas receiving less than 600 mm

Species	SITE REQUIREMENTS										MULTIPLE USE QUALITIES								Comments
	Coppice	Growth rate	Salinity	Rainfall	Rainfall short rotation	Soil pH	Soil texture	Frost	Poor drainage	Irrigated	Fodder	Money	Agroforestry	Shade and shelter	Timber	Erosion control	Fuel reduction	Fence posts	
Casuarina cunninghamiana		M	*	550	500		CL		(*)	*				*	*				Good limestone tolerance
Casuarina glauca	*	M		350	350		CL		*	*	*			*	*				Suckers
E. astrigens	*	M		500	400	ANC	CL	M						*	*			*	Moderately durable
E. bosistoana	*	M		600	500	AN								*	*			*	Prefers well drained fertile soils
E. brockwayi	*	S		300	250	ANC		M						*			*	*	
E. cladocalyx	*	S		550	300	ANC	CL		(*)		*			*	*		*	(*)	Good burning qualities
E. cornuta	*	M		400	350	ANC		M						*	*			*	Subject to borers when stressed
E. dundasii	*	M		250	250	ANC		R						*			*	*	
E. fasciculosa	*	S		450	350	ANC		M	*		*		*	*				*	Useful on infertile and skeletal sites, good burning qualities
E. gardneri	*	S		350	300	ANC		R			*		*	*				*	Suits wide range of sites, can be wind-shy
E. gomphocephala	*	M		450	350	ANC	CL		(*)				*	*				*	Marked limestone tolerance. Subject to borers when stressed
E. leucoxylon	*	M		450	350	ANC		M			*		*	*				*	Many variable seed sources. Difficult to split
E. occidentalis	*	M	*	350	300	ANC	CL	R	*	*	*		*	*				(*)	Durable in damp soils only
E. oleosa	*	S		300	250	ANC	S	M			*		*	*					A range of other mallees also suited to the semi-arid areas
E. porosa	*	S		400	350	ANC		M			*		*	*					Good limestone tolerance. Prefers depression
E. spatulata	*	M	*	350	300	ANC		R	*				*	*			*		Suits wide range of sites

Species suitable for areas receiving over 600 mm

Species	SITE REQUIREMENTS										MULTIPLE USE QUALITIES								Comments
	Coppice	Growth rate	Salinity	Rainfall	Rainfall short rotation	Soil pH	Soil texture	Frost	Poor drainage	Irrigated	Fodder	Money	Agroforestry	Shade and shelter	Timber	Erosion control	Fuel reduction	Fence posts	
E. botryoides	*	F		700	600	ANC	CL	M	*	*			*	*	*				Subject to borers when stressed
E. camaldulensis	*	F	*	600	500	AN (C)	CL		*	*		*	*	*	*			*	Tolerates lower rainfall along drainage lines. Many variable seed sources
E. fraxinoides	*	F		900	850	AN		M					*	*	*				Requires moist fertile soils
E. globulus	*	F		700	650	ANC		R		*		*	*	*	*			(*)	Subject to borers when stressed
E. grandis	*	F		1000	700	AN				*			*	*				(*)	Responds well to irrigation
E. nitens	*	F		950	900	AN		R					*	*					Requires very fertile sites
E. regnans		F		1100	750	AN	CL	R							*			*	Best development on deep friable clay loams with minimum 1100 mm rainfall
E. saligna	*	F		900	750	AN	S					*	*	*	*				Requires well drained soils
E. viminalis	*	F		650	500	AN	S	R				*	*	*					Requires moist, well drained soils

Key to the above charts

coppice	(*)	sucker or unreliable
*	*	coppice
growth rate	F	fast {8 t/ha/year
	M	moderate 1-10 t/ha/year
	S	slow {2 t/ha/year
salinity	*	ability to tolerate a degree of salinity
rainfall		minimum rainfall in mm/annum for sustained growth to maturity
rainfall (short rotation)		minimum rainfall required to grow species for short rotation crop, not sufficient to grow trees to maturity.
soil pH	A	preference for acid soils
	N	preference for neutral soils
	C	tolerance for calcareous soils
soil texture	S	preference for light textured soils (sands)
	CL	tolerance of heavy textured soils (clays)
frost	R	resistant
	M	moderate resistance
drainage	*	tolerance of poor drainage
	(*)	moderately impeded drainage
irrigation	*	responds well to supplementary water
fodder	*	palatable foliage for stock
honey	*	recognised value for honey production
agroforestry	*	suitable for integrated grazing and timber production
shade and shelter	*	for stock and crop protection
timber	*	marketable sawlog
erosion control	*	suitability for reducing soil erosion
fuel reduction	*	effective reduction of ground fuels as a result of suppression of growth of shrubs and herbage in the root zone
fence posts	*	durable timber suitable for fence posts
	(*)	suitable for fence posts after preservation

Reproduced courtesy of Woods and Forests Department, Murray Bridge and Department of Agriculture, Adelaide.

GREENHOUSE MANAGEMENT

PART I

by John Mason, Lilydale, Vic.

A greenhouse is only as good as it's user! You can grow all sorts of plants in a greenhouse and achieve all types of things which you might not be able to achieve otherwise, whether growing as a hobby or commercially. The greenhouse is only a tool though; a tool which enables you to keep your plants a little warmer and perhaps control a few other aspects of their growing conditions. You must know what conditions the plant needs and try to create those conditions with your greenhouse. You must watch the greenhouse carefully and adjust your management if conditions start to vary from what is desired.

You need to decide what you will grow in the greenhouse, and be aware that different plants have different requirements. It may not be possible to grow a great variety of plants in the greenhouse and get the very best out of each one, if each of those plants has different growth requirements.

What You Can Grow

Greenhouses are normally used for one of the following:

- To propagate new plants. It provides ideal conditions for seeds to germinate or cuttings to develop root growth.
- To grow tropical plants in cooler climates.
- To protect cold or frost sensitive plants over the winter months.
- To grow vegetables, cut flowers or berry fruits out of season or faster than what might be achieved outside.
- To grow nursery container plants over winter when there is little growth in the outside environment.

There may be other uses, but these are the main ones.

It is not usually advisable to try to use the greenhouse for more than one of the above purposes. The hobbyist who uses his greenhouse for multiple purposes must resign himself to the fact that he will not be able to get the best from it in all areas of use. This may be acceptable to the hobbyists but not to someone wishing to grow at a commercial level.

Greenhouses and Other Growing Structures

Greenhouses, hotbeds, cold frames, misting systems etc. are all types of equipment we use to aid propagation or to aid the growth of plants by providing some type of control over their environment. This equipment is outlined briefly below.

GREENHOUSES

Any type of walk-in building which maintains an atmosphere suitable for good plant growth. Greenhouses fall into the following categories: Glasshouses — glass walls (at least in part), very effective, long lasting, expensive. Fibreglass houses — fibreglass sheet, cheaper, medium lifespan, poorer insulated. Coreflute/solar sheet houses — medium cost, medium lifespan (15 years plus), more effective temperature control than PVC or fibreglass. PVC film (polythene houses) — polythene film over a metal framework (usually a tunnel). Very cheap, lasts only a few years then requires cover replacement, poorer insulated than others.

HOTBED

Heat is provided in the base of a bed (box arrangement) by



A small glass greenhouse with built-in shelving. A neat, compact unit, ideal for propagation and protecting frost tender plants, it may well be beyond the finances of the average backyarder.

means of electric heating cables, hot water or steam pipes, or hot air flues. The bed needs to have drainage outlets and be made from a material which will not rot (brick, concrete, treated timber). An ideal size is 1 m x 2 m (6 ft x 3 ft). The hotbed is filled with 8 to 10 cm of coarse propagating sand or perlite.

COLD FRAMES

A cold frame is almost identical to a hotbed except it is not heated and it has a cover/top made from glass, plastic, fibreglass or some similar material. Cold frames might be inside or outside of a greenhouse. A simple cold frame can be built for a very low cost and can be used effectively to strike cuttings or germinate seed. (Though not as effective as other structures.)

SHADEHOUSES

Used for protecting young plants usually after removal from the propagating area and planting up into the first container. Shadehouses allow plants to be gradually 'eased' out of their highly protected propagating environment to the harsher outside.

MIST SYSTEMS

This involves a series of mist producing sprinklers which spray the cuttings/seed at controlled intervals. They serve to prevent drying out and to keep the propagating plants cool in the leaf zone.

FLUORESCENT LIGHT BOXES

Plants of many species propagate well under artificial light. The cool white fluorescent tubes are preferable.

Part II next issue will look at the environmental factors which influence plant growth, plant needs and tolerances and the ways in which temperature can be controlled in greenhouses.

John Mason's book *Starting a Nursery or Herb Farm* contains a chapter on propagating structures and equipment.

PENPALS

I am Ghanian of 22 and a worker. I would like corresponding partners from all over the world. Hobbies include, travelling, visiting friends, collecting stickers, banknotes and albums, writing letters and exchange of gifts.

Moses Akwasi Darfour, Box 1031, ACCRA GHANA NTH AFRICA.

Hi, I am 11 years of age and would like a penpal between 10-14 years boy or girl. I like all outdoor sports and I'm very keen on fishing.

John Beck, PO Box WOODBRIDGE 7162.

I am a 14 year old girl who loves just about everything. I would like a girl or boy penpal, 13-16 years old.

Sharon Robb, River Rd, ALLAMBEE VIA YARRAGON 3823.

I am Ghanian of 25 and a worker. And I would like corresponding partners from all over the world from the age of 21 to 60 years. My hobbies are collecting banknotes, exchanging gifts, writing letters and visiting.

Joseph Anim, C/- Mr. Kofi Darfour, Box 1031, ACCRA, GHANA, WEST AFRICA.

Omigosh! I'm so embarrassed... I don't usually do this sort of thing! I hope none of my friends find out. Actually, I am a person, like you, and I often get excitable around the peak of the lunar month. I am probably a genius too because I believe, as Shakespeare did, that we are all actors on the stage of life and Shakespeare was pretty perceptive! Oh, and please don't write 'dear' at the beginning of any correspondence and avoid 'yours' or 'love' when signing off. Thankyou.

Luke Grealy, Garna Villa, CANDELO 2550.

I would very much like a penpal from your country. I am 23 and love travel, music, netball and exchanging gifts. I would like to write to anyone between 16 and 54 and will answer all letters.

Miss Shelly Lovelong Howell, PO Box 90, OGUA, GHANA, WEST AFRICA.

Hello. I have black hair and brown eyes, am 5 ft tall, Catholic, and my hobbies are singing, cooking, writing, gardening and reading. I am aged 30, single and a medical technologist. I would like letters from friendly Australians.

Evangeline T. Duenas, C/- Engr. Demicais, 4342 Jalan Kerma Negara, Kuala Belait, Brunel.

Hi, my name is Trevor and I have lived in the city and country, but now serving time in jail — nothing serious, but the problem is I am here and would love to hear from any ladies aged 16 to 35 years. I am 25 years old love surfing, fishing, farming, touch footy and one day would love to settle in the country near the water. I feel the sea offers just as much as our land don't you.

Trevor Holloway, PO Box 115, ERMINGTON 2115.

I would like a pen friend (28-40) gentleman, honest, understanding, humble, open minded, and a Catholic. I have fair complexion, short black hair, black eyes, 5 ft in height, I'm not so pretty, but friendly and cute. My hobbies are: dancing, swimming, strumming the guitar, watching movies and tennis.

Emma T. Babayson, Purok No 3, Liberfad, Butuan City, PHILIPPINES 8001.

Hi there, my name is Emily Petherick, and I'm a 13 year old girl, looking for male penpals from 13 to 16 years from Australia or overseas. If you like 'Footrot Flats', 'The Young Ones', 'D-Generation' please write soon.

51 Smith St, THORNBURY 3071.

Hi there! My name is Robert Nathan Patrick West! I am 6 years old. I would like penpals between the age of 6-7 years old. I collect plastic dragons and all the Friends of 'He Man'. I have 3 older sisters who are Lara, Emily and Catherine. So if you are interested put your pens to paper and write to this address.

86 Circle Drive SOUTH CRANBOURNE 3977.

My name is Alicia and I am 11 years old and would like a penpal from the ages 10-13. I like horses, jazz ballet and music. I would love a penpal from England or Germany or anywhere in Australia except Victoria. All letters answered.

Alicia Gardiner, Dingley Dell Rd, THORPDALE 3835.

My name is Samantha Miles, and I am thirteen years old. I go to Salisbury High School, and my hobbies are: running, swimming, ballet and I enjoy modern music. I would like any male or female between 13 and 15, of any nationality to write to, particularly around the Iluka, Yamba, Wombai areas, as we are thinking of moving down that way.

120 Clipper St, INALA 4077.

Hi there! I'm eight nearly nine. I would like a female penpal between the ages of 7 and 13. My enjoyments are horse riding, little athletics, reading and story writing.

Sarah Cartwright, 13 Heaslip Rd, PENFIELD GARDENS 5121.

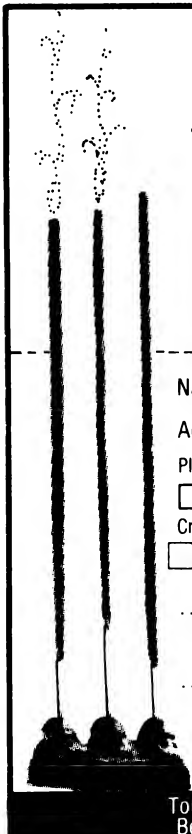
I am Seth Wood and I am 10 years old. I am looking for a penpal of any age and my interests are art, stamp collecting and horse riding.

95 Walker St, HELENSBURGH 2508.

CRYPTIC GRASSWORD

Continued from page 42

E	D	A	M	S	T	A	S	K	S
L	B	M	A	D	A	M	O	E	
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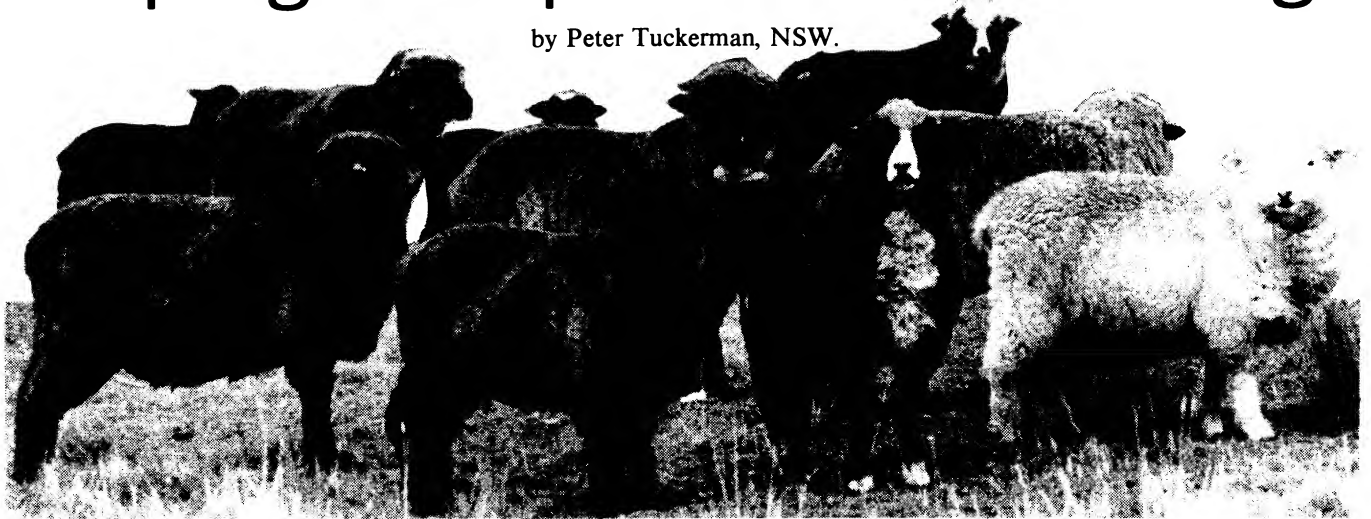
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Keeping Sheep on a Small Acreage

by Peter Tuckerman, NSW.



While sheep may lack the glamour of a showy thoroughbred horse, they are eminently suited for the small farmer seeking a utilitarian animal. Being wool producers, they don't have to be killed to provide a useful product. Sheep are also quite competent in converting grass into a more concentrated and useable form for humans. Sheep are not just versatile, they are also very flexible, adapting to a wide range of climatic conditions from desert to mountains. One reason for this flexibility is that their breeding cycle fits in with the annual cycle of pasture production, i.e. The greatest demands on a breeding flock are when they are mated and when they lamb. If you join in autumn and lamb in spring it is thus possible to take advantage of the different seasonal growth patterns. With so many breeds and types available, the emphasis of the enterprise may be directed to meat or wool depending on the farmer's needs and the climate.

However, for the small farmer wishing to achieve a degree of self sufficiency or just a small commercial activity, one of the dual purpose breeds such as Gromarks, Corriedales or the traditional Border Leicester crossed with Merino should be satisfactory. On a small farm the scale of production does not warrant a specialist animal. For example, with the above breeds the farmer has the flexibility to adapt the flock to changing circumstances by mating the ewes to a merino if the need for meat is reduced or the price of meat drops.

Dual purpose sheep also have physical attributes which contribute to this suitability for the small farm which is more often than not run on a part-time basis. A sheep without wrinkles, free of horns and sporting a clean open face is generally an easier animal to care for due to being less prone to fly strike and grass seed problems. Also the absence of wrinkles does make the task of the infrequent shearer a little less arduous and hopefully avoids the appearance of one trying to skin the animal while it is still alive. Not being of the extreme build of an animal bred solely for meat, that is thickset with broad shoulders, lambing difficulties are less predominant. The ewes are generally good mothers with an ample supply of milk for the rapidly growing lambs.

Naturally these utilitarian sheep aren't perfect, their size compared with the Merino plus their being more robust

necessitates more substantial fencing and yard requirements. The longer broader wools tend to part along the backbone which opens the wool to the weather, causing problems of discolouration and 'waste' backs. Having a greater influence of inheritance emanating from the British Isles the dual purpose or cross bred has a restricted breeding season. Which simply means they are more reluctant to breed in the spring for an autumn lamb. This point shouldn't be of great concern for the small farmer who isn't attempting to achieve price benefits of selling early lambs. If the purpose is to provide a cheap source of good meat for the household it appears more sensible to have ewes lamb in the spring when pasture production is at its peak.

As for all farm activities it is necessary to determine what you want the sheep to do and likewise what you wish to do for the sheep. There is little point in growing meat sheep if you are a vegetarian. Identify what you hope to achieve from keeping a small flock, time constraints and even your ability to perform the necessary tasks (bad back, faint at the sight of blood etc.) If there is a person in the household who enjoys spinning, take into consideration their requirements. Design a farm activity which suits you and your land. By approaching the project in such a way, a unique and tailor made sheep farming activity can be developed which is more likely to succeed because the operator is satisfied and the environment isn't placed at risk.

Getting started with sheep is not difficult, but before rushing off to acquire your future flock it is most advisable to take stock of the current situation on the farm. How good are the fences? How many animals could the land safely carry without degenerating the pasture or risking soil erosion? It is certainly worthwhile, if you are in sheep country, to look over the fence and see how the neighbours manage their enterprises! The assumption being they have gathered a few clues over the years. It would appear beneficial to follow their lead on matters such as shearing time, lambing or even which drench to use. However don't feel obliged to follow this lead unequivocally, implement different ideas and perhaps experiment.

Reprinted from *Good Life* Summer 1984, Small Farms Network of NSW, 95 Cattai Ridge Rd, Glenorie, 2157.

A 12V ELECTRICITY SYSTEM

by Nevin Sweeney, St Clair, NSW.

After reading the inquiry in GR 52 about 12V electricity systems, I thought readers might be interested in my set up. Although I live in Sydney, I have been interested in alternative power for a number of years, and I was determined to create my own back up/emergency 12V power supply. The system I will describe has been in operation for four years and is still going strong with no (major) breakdowns. This is 'how I did it' and not necessarily how it should be done, so if you pick the eyes out of it I may be of some assistance.

The system started out in reverse: instead of getting a power source, storage system, then wiring, I did some initial wiring, put in the lights and switches then got a couple of batteries. To charge the system originally I used a 240V battery charger. Broken up into its parts, the system is as follows.

Wiring and Attachments

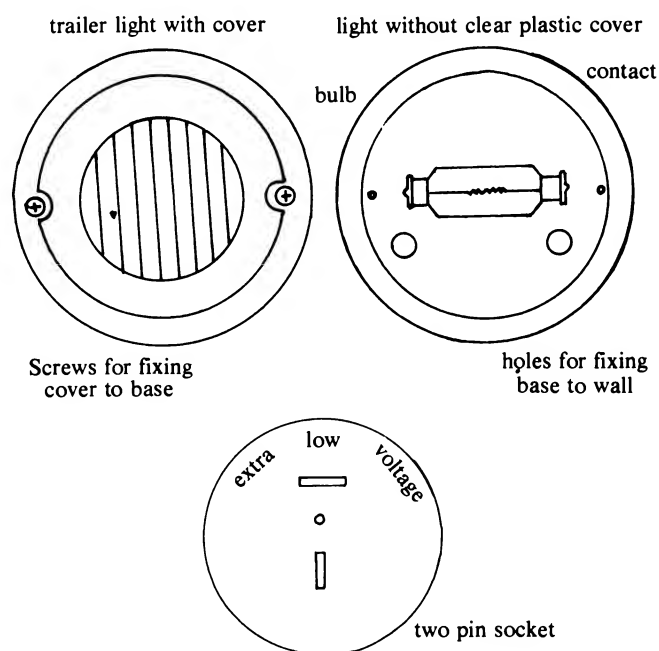
The wiring to use is multicore, plastic coated, two run (i.e. two sets of wires) non-polarised wire from Tandy (expensive, but good) of about 3.5 mm ($\frac{1}{8}$ in) thickness (including plastic coating). The longest run of this wire is 20 m (66 ft) or more and I can detect no loss of brightness over this distance. You could probably use single core wire (like 240V house wiring). But I have been told multicore (automobile wiring) is better for 12V. I don't know why. To join wires I used 'Scotchlok' or similar plastic auto wire joiners, again not cheap but they gave a good, solid, quick join every time. I have run a number of circuits (only with an auto fuse) and if one light is on in the circuit it dims a little if a second is switched on, so from this point of view the less lights to a circuit the better.

For switches I used normal 240V flush and raised mount switches because they were cheap and available as is the hardware for fitting. I was originally told these would not stand up to a 12V load but it's been four years so far with no breakdowns. I even used them on the switchboard as main switches with no problems.

For lights I trialed a fluorescent trouble light and a circular clear 18W trailer light — the incandescent trailer light won hands down on brightness, so I used those. The trailer lights were less than \$2.00 each originally from any large store, whereas the proper 12V caravan fluoros were \$35.00 at the time and too expensive, so I have never used them. There are however, two main problems with the trailer lights:

1. Only the ones with the steel base are of any use. The ones with a chromed black plastic base melt the base and become useless. The steel backed ones are becoming scarce as the tackier plastic ones take over.
2. The bulbs which are of the double ended festoon type (see diagram) tend to burn out quickly. Some last a long time but you go through a fair few to find the good ones and that goes for all brands. I use 18W, but lower wattages are also available, two of these in a 4 m x 5 m (13 x 16 ft) room throw out enough light to read by.

Due to these problems I will invest in a fluoro (caravan



type) for the garage and see how it goes. For appliances I use 32V two pin polarised plugs and sockets (see diagram) on the soldering iron, TV, radio, CB, fan and so on. I have never used an inverter to obtain 240V from my 12V system so I have no experience in their use.

Storage

Michael Hackleman in his book *'Wind and Wind Spinners'* (Peace Press USA) advocates the use of 6V batteries in series to obtain 12V. My original system ran 2 x 138 AHr 6V batteries which ran very well up until their replacement a few days ago. These batteries were obtained from the local battery reconditioner for \$25 each and did all I asked them to for four years but were not deep cycle and would probably not have survived many complete discharges. Some time after commissioning the original set I bought a second set but when wired up these caused a continuous discharge, possibly due to a collapsed cell in one. They would not hold a charge when in use but were certified OK by the reconditioner; I never did find the fault and eventually discontinued their use. I have just recently retired the old faithfuls and replaced them with a fleet of 8 x 90 AHr 6V batteries which are deep cycle, very nice but very expensive.

Power Generation

I have tried several ideas here but only one with any degree of success. The first method was direct connection to the power grid via a battery charger, hardly self sufficiency. The second was a petrol 12V generator based on a car alternator and a mower engine — good idea but many design problems mainly due to a too small mower engine. This idea I am currently revamping into a 12V powerplant/welder but it is not yet finished. The original was a flop. The third idea was a Solarex

X44BG solar electric panel costing (at the time) \$351 and rated at 1.35 amp output (although on a good summer day I have seen it charge as high as 1.8 amps!) which is an unqualified success. Day after day it quietly and with no smoke or fumes pumps out electric power continually during daylight hours. It was expensive but impresses me greatly, talk about appropriate technology! I also tried a small wind powered generator using bicycle components, but it also has its problems, mainly due to too thick a metal being used for the sails. It needs more work but may eventually be a goer.

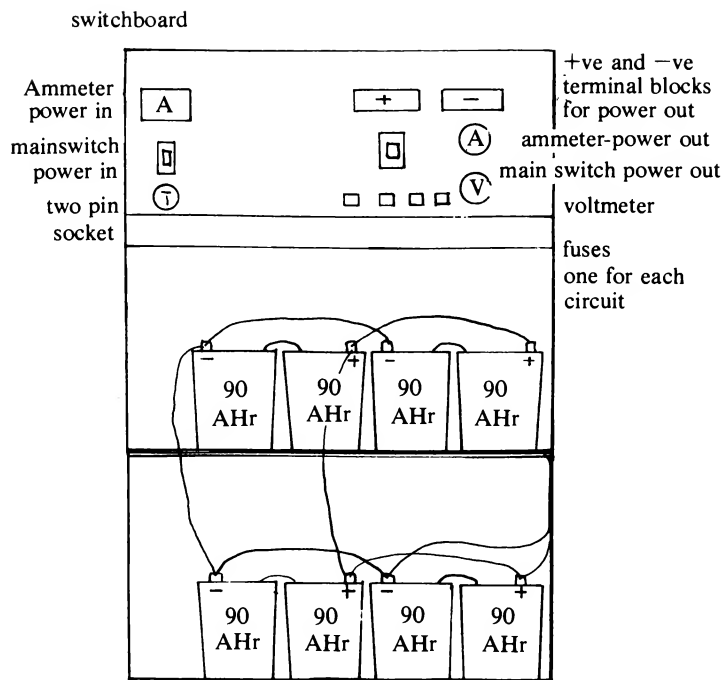
Finally I will include a sketch of my switchboard.

The setup is based on a cheap metal do it yourself shelving kit — reinforced to take the batteries (heavy!) and the backing board for the switchboard is 15mm (³/₅ in) pyneboard.

This is 'how I did it' and I hope it is of some assistance to you.

Handy Hint

If you want to proof wire nails so that they won't pull out, take a jar, one teaspoon of honey, and a cup of water. Dissolve the honey in the water, and soak the anils for a few hours. Allow the nails to dry, and then drive them home. You'll break the head off the nail before it will pull out again.



The Gentle Art of Spending Money

by Juliet Summers, Bullarto, Vic.

We don't have heaps of money. When we do, we do one of two things with it, save it or spend it. Now I'm not against saving money, but why do I save money? To spend it, eventually.

This leads me to theorise about spending. People can only save money and do without for a certain period of time. Miles and I scrimped and saved for two years to save up for our piece of land and set ourselves up. We both had a non-spending phobia at that time and did without lots of so called necessities. We wouldn't let ourselves buy anything that wasn't absolutely 'essential'.

With the purchase of our block, we discovered that we'd overbudgeted by \$500. Five hundred unallocated dollars. Five hundred dollars to spend!

My first thoughts were 'Save it, save it'. But as I gazed at my bank book the flood gates of new 'necessities' opened and the 'hole in the pocket syndrome' set in.

The demise of our \$500 was rather insidious at first. I think it started with us buying an extra magazine when we went to pick up the new issue of *Grass Roots*. Then it was a big bottle of bundy rum and a whole carton of cigarettes. Next came a full tank of petrol: 'Fill it up' I remember saying smugly to the attendant, something I couldn't remember having said for ages. Next a \$50 total at the supermarket checkout. The spree had started in earnest now, a futon mattress came next, then four rather expensive books. I discovered mail order books and back issues of *Grass Roots*. We ordered 10 back issues and 4 more books, and then ordered one from the *Readers Digest* — hell why not, it was

cheaper buying it from there than from a book store. Next, saws, nails, chicken wire and a primus stove.

The *piece-de-resistance* was our shiny new ghetto blaster, which sits in pride of place on our cupboard.

That was about it. All gone. I look around with a smugness at our new hatchet and spade and the chipboard flooring. Every time it rains I think about our beautiful new water tank catching all the water. I think of the money and then I think of all the fun I had spending it.

My theory seems to bear up to the test of time, as we are now saving again and staying out of most shops, just in case. Sprees don't seem to last long — you run out of money too quickly.

I've jotted down a few tips for anyone game enough to blow some savings;

- 1) don't look at your bank balance unless it's to check there's enough money in it to buy a particularly pricey item.
- 2) Never take out \$10 to spend when you can spend \$50 and buy 5.
- 3) Pay for everything in cash.
- 4) Balance out money spent on good times with that spent on material items that you've always wanted but were too stingy to shout yourself.
- 5) Don't promise to buy lots of stuff for friends. Shout them dinner somewhere instead and all enjoy it.
- 6) Don't put stuff on lay-by. When sanity returns it'll seem like a waste of 'good money'.
- 7) Recognise that you're on a spending spree, and accept that it's a temporary state. Happy spending.

The Seed Bank

by Jeff Hodges, Holland Park, Qld.

As a natural gardener, I'm always looking for ways and means of making the garden system emulate a natural ecosystem as closely as possible. If your garden works *with* Nature, then you're going to have fewer problems, and less work. With this in mind, one of the most significant discoveries I have made in the past few years, is what I call the 'Seed Bank'.

In any natural ecosystem, there exists in the soil, a rich supply of thousands of seeds — a seed bank, or storehouse. They come from the many different plant species in that ecosystem, or are blown in from other ecosystems by the wind or brought in by birds and animals.

Of all these thousands and thousands of seeds, only a very few will survive to germinate and grow into mature plants. The others provide food for ants, birds, and insects, or do not find enough warmth, moisture and sunlight suitable to germinate, and simply die and decompose. Those seeds which do germinate provide the successive generations of plants and trees which allow the ecosystem to continue. Therefore, this 'Seed Bank' in the soil forms an essential resource of that ecosystem, and allows it to be self-sustaining.

So how can we make use of this in our gardens? How can we create our own seed bank of desirable plants in the soil?

The best way to do this is to let some of your plants go to seed. Select the plants which are the healthiest and strongest growing, and do not harvest them — let them set their seeds. When these seeds are mature, (this is usually when the plants themselves are brown and nearly dead), collect them. Keep a few for your own planting purposes next year, (it is best to make sure that they are properly dried and store them in small paper envelopes in a cool dry place till required), and scatter the rest throughout the garden.

You will find that one plant usually supplies enough seeds to both save for next year and to scatter thinly throughout your whole garden. When you do this with all the different crops and flowers you grow each season, you will, over time, build up a supply of vegetable and flower seeds lying dormant in your soil, and which will come up of their own accord each season (see diagram).

This seed bank has enormous benefits to you, the gardener. Firstly, it allows your plants to get an early start to the season — usually germinating and popping up everywhere just as the old season finishes. Further, the plants themselves are much stronger growing, and healthier than 'bought' seedlings, or seedlings raised by yourself and then transplanted into position. Secondly, it reduces the amount of work for you in the garden. All you need to do once this system has been operating for four or five seasons, is to let the new germinating seeds grow up where they would — just clearing out the other plants and weeds, and thinning them out if they grow too thickly. Perhaps you might have to transplant certain individual plants to other areas of the garden if they're growing where you don't want them to, or if you want to fill in areas where no seeds have germinated.

I now find in my garden after five seasons, that I have carrots, livingstone daisies, celery, bok choy, marigolds, tomatoes, potatoes, portulacas, broccoli, and others, all coming up on a regular basis in the garden . . . all by themselves!

By creating a 'Seed Bank' like this in your garden, you take a further step in reducing the part you have to play in the garden — even to the point of allowing the garden to sow itself. You also begin to appreciate and discover aspects of your plants which previously you never took the time to notice. For instance, how many of you reading this article know what a carrot flower, or a beetroot flower looks like? Vegetable flowers are rarely seen, because we usually harvest them and pull them up before they can flower, and yet vegetable flowers can be some of the most interesting and beautiful flowers of all.

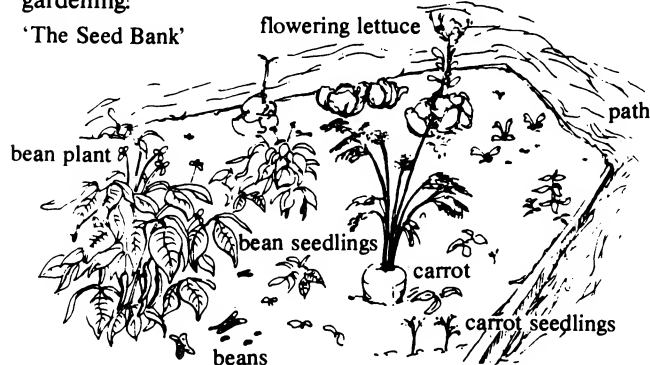
One final point. It is important that you buy non-hybrid seed to stock your seed bank initially. Hybridized vegetables and flowers may have 'hybrid vigor', but either do not set seed, or their offspring will not be 'true' — they will be different, usually inferior, to their parent plants.

Unfortunately, we are facing a situation where certain interests may monopolise our food producing plants, resulting in predominantly hybrid seed for sale. This situation could be worsened by the implementation of 'Plant Variety Rights' legislation. I believe this legislation should be opposed by all intelligent gardeners, because it could lead to a situation in which we will no longer be able to buy plants that will set their own seeds. All of us would be totally dependent on these sectionalised interests for our food. It could mean that in a few years, the only way to obtain viable seeds will be from registered seed merchants, and that we will only be able to buy hybrid varieties.

I encourage all gardeners to not buy hybrid seeds, and to protest at any monopolisation of our food producing plants. For the reasons I have just mentioned, I believe all gardeners should be seeking varieties of vegetables and flowers which will set their own seed, and we should be collecting and saving these, and building up healthy seed banks in our gardens.

I will discuss some further advantages of this seed bank, and of saving your own seeds in a later issue. Till then, happy gardening!

'The Seed Bank'



Jeff Hodges is the author of *Harvesting the Suburbs: Australian Backyard Gardening — A Natural Approach*. It is available from most bookshops for \$11.95, or directly from the author at 23 Macklin St., Holland Park, 4121, Queensland. You can also order it from Night Owl Publishers, PO Box 764, Shepparton 3630. Please add postage.

Down home on the farm...

by David Miller.



For quite a while I thought we were getting off lightly this winter. After the first torrential downpour, the weather seemed more like spring with only a few light showers on the odd cloudy day. Then suddenly the sky opened — floods in the city, rivers bursting their banks, and mud from front gate to back door. Potholes in the drive quickly filled with water and deepened considerably as the crew bounced through them on their way to and from work. The path to the little house had to be improved, to reduce the amount of mud being shifted onto the floors inside, and gutters had to be dug to drain water into the paddocks.

On the farm the land is undulating, and in winter water runs from other properties into ours, streaming over the paddocks to the creek bed. The soil gets sodden after the first good downpour and driving on it is treacherous. The surface may look quite hard and safe, but once the crust is broken, a sloppy mess is revealed which must be avoided at all costs. In the past, timber cutters have had to leave their bogged trucks until early summer before they could be moved.

Winter ushers in a change of driving technique. I have to be constantly aware of soft spots in paddocks and try to remember the whereabouts of potholes I bounced over earlier in the year. If the wheel of the tractor goes down, I face the long and arduous process of digging it out, often to find that it only sinks deeper each time the wheels turn. One year I went out for firewood in the four wheel drive. The wheels went down after I had loaded about six short logs, so using a jack, slabs of stone and, you guessed it, the logs I had just loaded for the fire, I slowly and patiently made my way back to the track, leaving behind a trail of deep wheel ruts. I used to get quite hot under the collar when bogged, but these days I know there is nothing for it but to start digging and try to forget all those jobs I had planned for the day. After a while it becomes a little adventure, and sometimes the highlight of the week, but only if I can see myself escaping. These days I avoid these little dramas by keeping rigidly to the well defined tracks and only venture off when a close inspection or prior experience ensures safety. At these times I am usually feeding grain to the sheep to keep their weight up before lambing. Last week I felt a special thrill when I noticed the first three lambs of the season gamely struggling after their mothers. Drysdale lambs always look lovely with their square ears, short noses and curly coat. When quite young, they will walk right up to you and stare as if to say 'You are a funny shape for a sheep, and why haven't I seen you before?' Then they wander off to find their mothers again.

Drydales are built to thrive in cold wintry conditions. Their ancestors are the Romney Marsh sheep, an English breed ideal for high rainfall areas. The Drydales, however, are carpet wool sheep and grow a thick coat of coarse hair to

insulate them from the elements. The extra feed put out for the ewes at lambing ensures a generous supply of milk for the lambs, so their early growth is unchecked and they have the energy to keep up with their mothers at all times. This keeps them out of the reach of any fox looking for a lamb that is exhausted and trailing behind. To date this strategy seems to be working well, with many of the ewes having large full udders by the time they lamb.

I brought our Scottish Highlands home to calve this year, so the cows and their new calves would get used to being close to people. I love having our special favourites around the house at calving time, but it is difficult for farm stock when they are brought home to our little paddock. They must quickly adjust to constantly seeing people walking around with buckets and a trail of poultry behind, when they are used to the wide open spaces. Initially there was McTavish the steer and our roan Dairy Shorthorn bull. Then the two cows came and McTavish immediately took them over the fence and showed them the local geography. They were only too pleased to get away and I was reminded of the need to restore the electric fence. Megg came home from a trip to the tip with news of their whereabouts. One of the locals had seen them 'down the lane' a couple of blocks away. I duly found them lying down chewing cud, and walked them home. Next we had to sell the Shorthorn, so I caught him one morning and put him on a halter in the shed. But he didn't make the sale the next day, the agent advised weighing first so I had to wait another week. That night Megg was away and while doing the rounds with the torch at 11.00 p.m., tucking the birds in for the night, (she always checks) I remembered the bull. 'He might as well go back to the paddock for another week' I thought. He is a placid likeable fellow, so I led him down to the Highlands with one finger through his nose ring, letting him off about 25 metres from them. He was so glad to be back that he ran towards them, sloshing excitedly through the water in the dark.

Now there is another side to this story. If you are a Highland, used to having quiet nights undisturbed, and you have suddenly been moved to the stressful and unfamiliar lifestyle of rural suburbia, you become rather perturbed, suspicious and uncomfortable. Your only consolation is knowing where to jump the fence if you have to, but you are happy to be eating some good hay in the meantime. Now if you are quietly spending a moonless night at the end of the paddock when you hear a six legged monster approaching through the slush (my goodself with the bull and the torch) and then the monster starts to search for you with its blinding single eye, and suddenly lumbers in your direction, you have every reason to take fright and flight.

And that is just what the three Highland cattle did, leaving

the poor old Shorthorn wondering what he had done wrong, and me muttering, and the newly repaired fence in tatters.

At first I thought they were probably just a few metres up on the side of the road, but after 15 minutes driving, I finally found them at the corner of the lane, and by the time I had parked the car, they had fled again. They were really spooked, so I could only try to round them up on foot with the spotlight torch. Half the lane was completely underwater, and I could only hear the cattle — every time they heard me struggling along behind them, they took off again and I just heard 12 legs swishing quickly through the water while I scrambled along the drier roadside. I can remember thinking furiously that if they wanted to run, I would run them, so I ran them round the block to tire them out, along muddy firebreaks and round corners until they were tired enough to slow down. Then we all walked slowly home panting loudly, and I hit the hay at 1.30 p.m. after running about 10 km. We have all been very good friends ever since.

The Highlands look like primitive animals, and in many respects behave that way, too. They are not difficult to handle, but when confronted with danger, will group together to protect a calf. Now Megg has a Queensland heeler called Feathers. This roly poly ball of dependence was supposed to turn into a fierce guard dog who would stop all and sundry at the gate before we approved entry, permanently deter all foxes, and round up any cattle in her spare time. Feathers, however, treats all visitors with a welcome smile, and thinks cattle are only for looking at. Her motto seems to be 'Pat me once and I will love you forever!' To be fair, though, she has shown promise lately at spotting foxes at night. Well Feathers obediently followed Megg into the paddock just after the first cow calved. Instantly the Highland family protection plan sprang into action. The second cow rushed over to guard the calf with the steer, while mother let out a loud, piercing bellow, tossed her horns in the air, and leapt at the surprised intruder. I have never seen a dog move so fast. The fierce guard dog, entrusted with the family fortune (all of which is currently invested in turkeys) fled to the verandah and sat with the cats as if that was where she was meant to be all the time. Megg and I watched in amazement, but I detected a look of disgust on Megg's face as she watched the guard dog head for the house. They say heelers take a while to mature.

My pair of Toulouse geese are now a year old, and have grown and matured considerably in that time. They are the aristocrats of the place, who strut and flap as if assured of an audience, and in between calmly and compatibly go about the business of harvesting the grass and enjoying a splash in the water. I have always loved waterfowl but never followed my interest because of lack of space and lack of water in summer. I can now see that if I pipe water to each enclosure, there will be enough all year round, and since I have more sheds to make for the other poultry, I might as well make a few extra. I have always thought geese could live well on the turkey tucker I see about, so I have plans for one or two more varieties which I have ordered for next year.

Astrologists might say my interest in waterfowl is only to be expected, as I am a water sign myself, but I can think of a few other reasons. Waterfowl are easy to keep as long as they have enough water to wash in. They need sufficient protein

while growing, but can be used as rubbish bins and fed scraps thereafter. Geese can even be put out to graze like sheep if the pasture is lush. Waterfowl also suffer from less disease if kept sensibly, and they have such lovely plumage.

Ducks come in an attractive variety of colours and shapes. They also have wonderful personalities, and I did not realize how much of Donald Duck's antics were really duck (not human) until we had some Khaki Campbells many years ago. Donald is a Pekin duck. This is a commercial breed, kept for the table and usually crossbred with another white bird, the Aylesbury, to gain faster growth rate. My pair of Pekins have some light yellow plumage which is acceptable, but they will need plenty of bathing water to keep themselves clean.

Back when we had the Khaki Campbells I can remember telling Megg about Indian Runner ducks. She laughed and accused me of trying to lead her up the garden path. There was no way I could convince her that there was a breed of poultry, let alone a duck, called the runner. And when I said it was named because it ran rather than walked she knew I was trying to put one over. But run they do. Runners look like white wine bottles, angled at about fifteen degrees to the vertical, with legs on them. They are one of the best egg layers and their thin bodies, long necks and unusual mobility fascinate all who see them. Runners come in a variety of colours, the most common are white, and fawn and white. Mine are a rich chocolate color which, I hope, will be easier to keep clean.

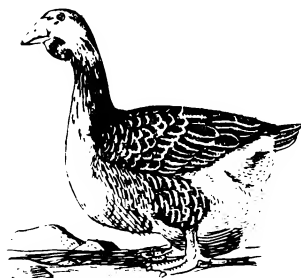
The other breed I have is the Elizabeth duck. I came upon these by chance when we were collecting a few Light Sussex hens one night from people who were moving house. The Sussex were on the floor of a large shed, mixed up with half a dozen breeds of chook and duck. There was no room at the new place for all the poultry, so most had to be sold. I had never heard of the breed before but bought some on the spur of the moment because they were 'going to the market if not sold by the weekend.' Elizabeth ducks were bred from the mallard, which cannot be kept in most Australian states because they can escape and breed with native ducks, ruining the Australian species. The Elizabeths are smaller than the mallard, but retain the beautiful plumage. The female is a honey brown speckled bird, while the drake has all the beautiful browns, greens and scarlet of the mallard. They have plenty of personality, too, and can be heard quacking at all times of the day.

Sunshine was home last weekend, and we went fishing for pond life in the local dams. We used an old yabby net and ended up with about eight small fish, some minnows, for her aquarium at school. They were so popular she sold a few to the other boarders who are allowed to keep fish because they do not smell or make a mess. But a mysterious sickness wiped some of them out and I am awaiting a mortality report before we try for more. It will be difficult at the moment, because the dams are under their usual mid-winter flood with half the paddock under water. This occurs every winter and fills the dams for the year. The one year there was no flood was particularly hard, but we made it by pumping salty water from the bore. As soon as it stops raining, the water drains away within a week, leaving local ducks, and even a few black swans, high and dry on their nests.

Having a child at boarding school takes some adjustment, especially when she has made the decision to go herself. Most households see their children off into the world after what seems to be a tug-o-war between the need for home and security and the need for independence. This process usually takes place in the late teens or later and is often accompanied by the sound of raised voices. When a child moves out before this process even begins, much adjustment is needed on both sides. I feel that Megg and I were not ready for the move, but perhaps that is always the case. We may be always holding our children back, regardless of the age at which they leave, and the adjustment required is the same in any case. Regardless, a new person suddenly appears in the household. I find this quite challenging and even amusing at times. Because Sunshine is so tall, she fits into all Megg's clothes, and there are arguments about which items from whose wardrobe can be taken to school for a few weeks. They lately bought an army coat together at the disposals, and are planning to use it on a time share basis. The remarkable aspect is that it fits and suits both of them very well. The challenging part is that Sunshine is definitely a young adult at times, with quite an incisive wit and eye for detail. This combination is quite effective in demolishing any parent-type criticisms from time to time, although I must say she is quite fair. On the other hand, she is very much a thirteen-year-old and enjoys the whole culture of the age. I was quite amused when we collected her from school last. She could not go out before 'putting on the lippy' which, when applied, was almost impossible to detect without close inspection!

Having a child living away has its own brand of fun, too. There are excited phone calls, and time spent together seems extra special. Sunshine also brings home all the stories of boarding school which add interest to our discussions, and I detect a change in her attitude to the Miller family. Originally she enjoyed boarding school because she always 'knew where you would be the next day.' Now she likes to get home because the routine at school is so predictable.

And while on the home front, readers may be pleased and even surprised to learn that I am doing my own ironing, these days. None will be as surprised as myself when I asked if there were any jeans ironed. I was corrected, 'pressed' was the new term. As to their whereabouts, I was directed to look under the cushions on the chair in which I sat. There I found a neatly folded, 'pressed' pair of jeans. Under the cushions on the other chair was a pressed work shirt. I suppose I now have to make sure I sit equally in both chairs during the week, and if my clothes are not pressed then I must have been outside working too hard. Ah, the modern working woman!



Toulouse

MUD WALLS AND ROOF TOO

While mud brick construction has long been recognised as a money saver, builders have still been forced to use traditional and more expensive building materials such as timber and corrugated iron for roofing. To further increase the cost savings involved in this kind of construction, the Department of Architecture and Building at the University of Melbourne has investigated the use of mud brick roofing in vaults and domes. If such a technique were applied it would save about a further eight per cent of construction cost. It would also be an appropriate technology for the climatic conditions in many parts of Australia. Professor Allan Rodger said mud vault and dome roofing can be used on any domestic size construction and be built by two workers.

Research was conducted by inspecting a four year old dome vault mud building constructed in Maryborough, Victoria and by interviewing workers who were involved in the project.

Mud brick construction has application not only in Central Australia where night and day temperature vary greatly and timber is scarce but also in North Africa and the Middle East. Professor Rodger believes that mud brick construction has many valuable characteristics and should be encouraged as an alternative building material. 'Mud brick construction allows relatively unskilled labour to be applied to a cheap material in a way which adds value and creates wealth. It has a very high labour (non-cash) component and only a small cash component, thereby offering opportunities to those who are short of cash. It has a relatively low environmental impact on two counts. It uses plentifully available materials (mud, straw and labour) and it frequently can be used as an alternative to the relatively high environmental impact of using structural timber.'

Reprinted from *IYSH Mail The International Year of Shelter for the Homeless*, PO Box 111, Dickson 2602. No.1.

Handy Insects in the Garden

Praying Mantis will devour moths, beetles, caterpillars, and grasshoppers.

Hoverflies lay their eggs in aphid nests where the little maggoty larvae quickly make short work of a whole colony.

Lacewing larvae use their hooked jaws to eat aphids, mites, mealy bugs, scale insects and thrips.

Ground Beetles, black and brown, come out at night to feed on grubs and caterpillars.

Dragonflies devour large numbers of mosquitoes and other flying insects.

Robber Flies use their sharp, spear-like proboscises to pin hard-shelled beetles to trees before they suck them dry.

Taken from newsletter of the Brisbane Organic Growers Group, PO Box 550, Fortitude Valley 4006.

GRASSIFIEDS

PROPERTY FOR SALE

NEW SOUTH WALES

TWENTY-FIVE ACRES mid north coast inland from Crescent Head, only 15 minutes from Kempsey. Lightly timbered, gently sloping land. Fully fenced with creek, water holes, and dam, elevated house sites with beautiful rural views. School bus, electricity, phone, mail available \$30,500 ONO. Ph: 065-669-342.

NORTH COAST NSW house on 15 acres, well-watered, friable land. Comfortable, solar lights, gravity fed water and irrigation, generator, garden, fruit trees, 50 km Kyogle. \$40,000. Ph: 066-321-667.

COMBOYNE 170 ACRES forests 30 acres cleared secluded views, potential for market gardening \$28,000. Ph: 065-504-148.

NYMBOIDA NTH COAST 66 acres lightly timbered, steeply undulating hills to grassy creek flats with some forest in an environmentally sensitive valley community-sub divisible-asking \$35,000. Tel: 066-494-180.

TWEED VALLEY — 3-B/R timber house in excellent condition. Town water, power, 5 minutes to school, shops. Views to Mt Warning and scenic rim. \$38,000. Ph: 075-384-832 AH.

NORTHERN NSW 170 acres 60 km West Grafton, Copmanhurst Road. Partially fenced, access road, large dam, cleared valleys, lots of bush. House-site cleared, separate bathroom, complete with bath, toilet and water connected. Fuel stove. 16 ft caravan on-site under large shed. Fenced garden with sprinklers. School bus available. Owners moved nearer families. \$24,000 ONO. Ph: 062-487-475. Or write M. Sabet, 60 Torrens St, BRADDON 2601.

ACRE GOOD SOIL NEAR YASS. Power, water, phone, low rates, schools, churches, golf, bowls, swimming. Details 062-546-783. Half available.

BELLBROOK 54 KM WEST OF KEMPSEY. Two blocks one 4½ acres with fibro cabin, water tank, 3 kva generator, gas fridge etc. other 2¼ acres both partly cleared with permanent creek. Building allowed, 15 mins walk to store and Macleay River \$24,500 for both blocks. ONO Ph: 045-796-564 or write John Janzen C/- BELLBROOK PO 2440.

NIMBIN 62 ACRES with 2-B/R W/B house. Five minutes from Nimbin (25 min Lismore). In a secluded valley surrounded by crown land — spectacular views. Permanent creek supplies gravity fed fresh spring water, power, phone connected. \$63,500. Phone Kathy MacLachlan 07-369-02-73, or write C/- 23 Devon St, RED HILL 4059.

25 ACRES 30 mins NW of Kyogle. Surrounded by state forest, natural virgin bush with scenic mountain views. Dam plus partially constructed shed. Remote, tranquil, reluctant urgent sale \$18,000. Please write: L. McHugh, 13 Friend St, GLADSTONE 4680.

NAMBUCCA VALLEY 10 ACRES, delightful modern 3-B/R house, new shed, many established fruit trees, permanent creek, tar road, in lovely valley 5 km from Bowraville, 15 minutes to beaches. Nothing extra to spend on this top property \$85,000. Ph: 065-647-540.

ATTRACTIVE 11¼ ACRES with dam on half kilometre frontage to Macintyre River. 40 miles Inverell, 14 miles Ashford sealed roads. Granite and alluvial soils. 2-B/R W/B home L/U steel shed, carport, good fences. School bus, phone, power 200 metres. Rates \$140. Gas installed for lighting, cooking, heating, refrigeration. Wood stove and HWS, two days week mailrun. Suit active retirement or small GR family \$47,000. Genuine enquiries Phone: 067-25-72 ask 29.

BEAUTIFUL BUSH BLOCK 100 acres 15 minutes from Kempsey, 35 minutes from Crescent Head Beach. Lush timbered country, permanent creek, there are a number of idyllic homesites on this peaceful retreat. Power available. \$35,000. Ph: 049-484-138. Arrowsmith, 70 Mills St, WARNERS BAY 2282.

KEMPSEY MODERN 2-B/R dwelling set on 25 acres private parkland setting. 2 crystal clear dams, irrigation pump, septic toilet, gas stove, modern bathroom, masport room heater, skylight windows, kitchen, lounge, 60 gal solar water heater with extended off peak back-up, sunny verandahs, 8 minutes town and beaches, total privacy. \$68,000. Ph: 065-628-278.

40 ACRES 3-B/R fibro/timber home. Permanent creek. School bus at door, main road frontage. Bargain priced \$50,000 vendor terms available. Beautiful climate north NSW, suitable multiple occupancy. Ph: 049-731-319 Sunday-Friday. Whiporie near Casino.

100 ACRES BEAUTIFUL heavily timbered tallwood, large stands banksia, alive with native flora at Mt. Mitchell mid-way Guyra, Glenn Innes, northern tablelands NSW. Excellent access reluctant sale \$19,500. Ph: 067-231-418.

KEMPSEY 116 ACRES 180 degree views. 2-B/R timber home on concrete slab. Power, outbuildings, dams, rainforest, creek, school bus. 17 km (15 mins) to all amenities, ½ hour beach tar sealed road. Reduced \$66,500. Ph: 065-669-280.

LAURIETON SALE TRADE exchange. 90 acres cleared, 4-B/R BV home, out buildings etc. 5 miles from beach and growing town. \$210,000. Contact J. Broad, Kew Rd, LAURIETON 2443.

20 ACRES 1½ miles from Baradine NW NSW. 5 acres cleared remainder timber. \$7500 ONO. Details phone R. Elliot 068-421-455.

PAMBULA, NSW SOUTH COAST — 40 acres bush block including 6 acres cleared. Very secluded, surrounded by Yurammie state forest. North facing, permanent creek with crystal clear water, close to beaches. No power or phone. Price \$30,000 neg. Ph: 02-856-708.

ENVIRONMENT — small acreage tree-covered lots in Clarence Valley beside coastal national park. Town water, power, sealed road, phone. Low-cost house and land packages to suit your budget. Ph: 066-452-637.

MID-NORTH COAST 25 acres, mostly littoral rain forest, adjoins Hat Head National Park, 9 km north of Crescent Head, 1 km to beach, two bedroom concrete brick home, slow combustion stove, solar panel, 5000 gallon rainwater tank, ample borewater, electricity, phone, suit pigs, poultry, nursery, caravan/camping park. \$89,000 Kempsey Ph: 065-654-211 or 660-238.

MUDGEY FARMLET 100 acres. 2½ hours from Sydney. Hilly block with good access. Permanent water, good soil and timber. Suit all types of grazing. Comfortable cabin with many facilities. Some equipment included. electricity available. \$40,000. Ph: 02-724-41-33.

MUDGEY DISTRICT, 142 acres with large almond orchard, dwelling, 12 V wind generator, sheds, dams, 900 m elev. 900 mm rainfall, 4 W D access \$40,000 ONO. B. Armstrong, 12/23 Rosemont St, PUNCHBOWL 2196. Ph: 02-759-5888.

OUR LAND IS JUST NORTH of the Victorian border, inland from Eden, surrounded by state forests with nat. parks, lakes, beaches nearby. Plenty of wildlife and water. Bushblocks from 40 acres — \$21,000. some bigger blocks too. Ring Nancy on 047-841-020.

MACLEAY VALLEY 25 acres flood-free timbered bushland, dam, phone, power, 2 sides fenced. Good access 8.5 kms to Kempsey. Good soil, secluded \$30,000 ONO. Ph: 065-668-078.

NYMBOIDA 112 acres heavily timbered with large partially completed council approved 3-B/R B/V home, secluded. Panoramic views. Northerly aspect, 40 km Grafton. All weather access \$47,000 Ph: 066-494-202.

RETREAT 242 acres leasehold large dwelling, generator, solar power, permanent creek, septic toilet, slow combustion stove, kero fridge, swimming holes. Ten acres cleared absolute privacy, 4 W D access tar road one hour drive Port Macquarie. Forced sale \$60,000 ONO. Write Box 109, WAUCHOPE 2446. Ph: 065-859-343.

GOAT FARM. 60 acres pasture improved, 10 minutes Bungendore. Electric fencing, races, sheds, dams, bore. Never without water, two bedroom modern brick home, tiled bathroom, with \$700 aerial. \$128,000. Ph: 048-494-518.

MID NORTH COAST NSW. Twenty minutes easy run Port Macquarie, 60 acres of picturesque private land not isolated. All pasture improved with good shade/shelter. Excellent fencing, stock yards, milking bail, machinery shed, workshop. Abundant water for farm and domestic use. Attractive B/V and tile family home, 3 bedrooms, wide verandahs. Wooden flooring and picture windows throughout, cathedral ceilings in lounge/dining room open fireplace. Also large multipurpose room, 2 bathrooms. Home is surrounded by landscaped flower and vegetable gardens plus many fruiting trees and vines. Also small preserved forest area with creek, ferns, native orchids. The whole property is in excellent condition. Suitable cattle, horses or small fruit or blueberries. Genuine Vendor. Ph: 065-850-400. Price \$187,500.

NAMBUCCA DISTRICT 60 ha secluded, not isolated, 20 km to beaches, borders state forest, 10 ha cleared, rest timbered, creek and spring, creek flats, shed, tank, bails. \$57,000. Ph: 065-699-215.

ABSOLUTE RIVER FRONTAGE house, two acres, Gundagai area, power, phone, water, septic, secluded, good access to school bus. Ideal retirement enquire 077-731-615.

SOUTH COAST NSW — Cobargo Bermagui Area. 100 acres bush block, timbered, lovely views, good home site, excellent access, easterly aspect. \$47,500. Ph: Jim 0649-37201.

GRASSIFIEDS

PROPERTY FOR SALE

NEW SOUTH WALES

PICTURESQUE SECLUDED VALLEY ½ hour Lismore. Sturdy 2-B/R cottage timber construction, includes new S/C stove, fridge, pump, etc. 25 acres clean permanent creek, cottage garden, fruit trees established, several major markets in area for craft enterprises. Rates \$160 pa. \$57,500. Ph: 066-635-274.

ASHFORD 2-B/R W/B COTTAGE furnished, well set out grounds. Will trade car, caravan plus \$15,000. Ph: 067-2543 ask 96. House 100 yrs old. Good handyman special. Urgent sale. Full cash price \$20,000.

CHURCH WEATHERBOARD freshly painted, electricity, water connected some plumbing, large block near Harden shops. One hour twenty minutes Canberra ideal home workshop studio art craft or antiques, \$16,000 ONO Ph: 062-302-335. N. Russell, PO Hall, ACT 2618.

QUEENSLAND

CRAFT VILLAGE IN NTH QLD. Following the nation wide response to Pat Browne's letter in GR 59, Battle Creek Crafter's Village now has another 30 freehold blocks available, from \$5000. Also 3 houses remain at \$12,000. Only 10% deposit for this Craft Village. Contact Bob Mutton, PO Box 65, MT GARNET 4872. Ph: 070-970-188.

PROSTON NEAR KINGAROY 35 ha f/hold. Heaps of good timber, soil, house and dam sites. 34 in rainfall, fenced 3 sides. \$2200 ONO. Phone Rick 02-407-3333.

STANTHORPE 40 ACRES fully fenced phone, power, dwelling, large concrete floored shed, solar nursery 25 megalitre fish stocked dam, 20 acres irrigated remainder natural granite outcrops, lightly timbered \$90,000 equipment extra by negotiation. Ph: 076-833-221.

BUNDABERG AREA 52 ACRES 3-B/R home, sheds, yards, 350 plus income producing avocados, mangoes, bananas, etc. Remainder used for smallcrops (frost-free) and livestock but has been rested 2 years. Nine million gal. dam with fish, prawns. Irrigation, cultivation equipment, phone, power, school bus past gate. \$79,000. Ph: 075-354-250.

MAREEBA, ATHERTON TABLELANDS. two adjacent lots 20 acres and 16.8 acres with permanent dams, beautiful views, ideal for tropical fruit growing or raising horses. Sealed road and electricity reticulated to lots, situated 12 km from Mareeba and 76 km from Cairns coast. Cost \$36,000 and \$38,000 respectively. Can be sold jointly or separately. Negotiable. Owner residing in PNG. For information contact Tony Friend, District Office, Telefomin, W.S.P., PAPUA NEW GUINEA.

20 ACRES VERY SECLUDED, lightly timbered block. Gentle slope, small dam, phone, power available. GR neighbours. 3½ hrs Brisbane. Finance available \$14,950.00. Consider suitable exchange most areas. Ph: 066-769-474.

33 ACRES MIRIAM VALE — Lowmead. Income producing grapes. Lychees, other fruit nut trees. Grazing, smallcrops, irrigated by large dam. House, power, phone, school bus, tractor, implements. Ph: 079-745-193.

BULLYARD 2 ACRES, 2-B/R besser block, verandahs, built in kitchen, carpets, 5000 gal tank, good bore lockup garage 80 fruit nut trees power fenced beautiful views, \$98,000. Ph: 071-774-209 or write R. Herbert M/S 368, GINGIN 4671.

EUMUNDI AREA 2-B/R, sleepout, restored Queenslander, 3½ private acres. Dam, 6000 gal tanks, power, phone, good TV, shade house, BBQ, chook run, fruit trees, veg, school bus, 30 min coast \$60,000. Ph: 071-460-303. PO Box 41, KENILWORTH 4574.

NANANGO SE QUEENSLAND 6 acres power, phone, school bus, fenced, council approved, new shed, 2 miles tar road to town. Building approval. Soil on site assayed for mud bricks, council receptive to alternative building. Open to offers. Urgent sale. \$12,500. Ph: 063-843-320.

DARLING DOWNS 2 ACRES former school site, 20 mins Goombungee. \$4,800. Ph: Neil 076-347-693. Write John PO Box 371, WEST END 4101.

STANTHORPE QLD, cottage on 52 acres, 12 acres stonefruit and apples balance like owning your own national park with beautiful granite outcrops. Power, phone urgent sale \$50,000 ONO. Ph: Peter Warner 076-833-178.

ARMSTRONGS BEACH via Sarina low set 2-B/R beach house, ¼ acre tank water, pump, partly furnished, 100 metres beach, \$34,500. Ph: 07-262-6579.

GYMPIE-SECLUDED 57 acres freehold, hilly bushland, small A-frame house on slab. State forest 3 sides, wildlife, views, privacy, phone, solar power, inverter, concrete tank, wood stove, hot water, shower, cupboards, permanent dam, many fruit trees, easy access. 11 km south of Gympie. \$65,000 Ph: 02-476-1149.

SUNSHINE COAST HINTERLAND 5 acres northerly aspect, quiet setting, views to ranges, fenced, sealed road frontage, loam soil, good rainfall, spring fed dam. Large steel shed with concrete floor provides comfortable weekend. 1 km Conondale (shop petrol, state primary school, tennis, swimming), 10 min to 3 national parks, 20 minutes Maleny (bus to high school there) 45 min Sunshine Coast. \$37,000. Ph: 07-261-1535.

TULLY, NORTH QLD, handy Cairns — land 5.7 acres fertile soil, grow anything. Permanent running creek, irrigation licence. Suitable barramundi farming. 10 mins from Mission Beach, overlooking Dunk Island, handy Great Barrier Reef. P. Casey, PO, LOWER TULLY 4854. Ph: 070-669-354.

FORREST BEACH near Ingham, Nth Qld. this much loved low set 3 b/r home must be sold due to work commitments. Set amid 2½ secluded acres of lawns and trees, surrounded by rainforest and still only short walk to beach, shops and school. Est. fruit trees, fully fenced, yards, sheds many extras. Approved for subdivision, totally private. \$75,000 ONO some vendor finance available, phone 070-543-683 for more info. Write 2 Lotus Place MOOROPOOL, CAIRNS 4870.

BUDERIM 1082 m² sloping block drive and house site prepared all services adjoins 2½ ha bush park. \$15,000. Ph: 071-485-685.

WHITSUNDAY FRUIT FARM — 71 acres of rural seclusion 15 km from Airlie Beach. Modern 3-B/R 'Bush Haven' homestead (en suite), verandahs all round, cathedral ceilings, fitted carpets. Modern kitchen, Solarhart, swimming pool, bore and tanks. About 250 irrigated fruit trees up to five years old including about 100 lychees. Being developed as commercial venture, with primary producer status, this hillside property has other homesites and views eastward over Cannon Valley, \$215,000 neg. Jim Cladingboel, PO Box 20, AIRLIE 4802.

BLOCK NO 52 AT MIAGUNYAH TARA 13.1 ha shared dam \$13,000 ONO. Ph: 079-857-730 or write Mrs D. Hutchinson, 24 Laver St, MIDDLEMOUNT 4746.

GYMPIE 7 ACRES, permanent creek, dam, power, phone, levelled house site, 500 established native trees, 5 minutes from Gympie. One hour from Noosa \$20,000 neg. Ph: 071-866-146.

MELROSE NEAR WONDAI QLD. 44 acres formerly cultivated land mostly cleared some trees, power, phone available, school five minutes away, sealed roads, town facilities half hour away ideal farmlot \$33,000. For info and VDO send blank VHS tape Gerald and Heather Hanley, 51 Sharon Cres, KELSO 4815.

ISLAND RETREAT 3 bedroom hi-set house with shady verandahs looking out to sea on Coochie Mudlo Island. This gem of Moreton Bay is surrounded by sandy beaches, with abundant marine and bird life. House suit holiday or permanent resident. Double garage under plus extra bedroom and lounge area with shower and toilet. Coochie Mudlo is 10 mins by ferry from mainland and 45 mins from Brisbane and Gold Coast. Many Island amenities including bus service, shop, church, social clubs. Over night accommodation available for serious buyers. \$73,000 ONO. Ph: 07-207-8225.

40 ACRES SELECTIVELY CLEARED, comfortable living quarters, generator, septic, woodstove, carport, HWS, water tanks, chook-run, \$29,500. Ph: 074-653-556. Tara-Chinchilla Road, TARA 4421.

TROPICAL RAINFOREST. 12 acres 4 cleared and lawned. Permanent creeks. Income from registered nursery and strawberries. Many more fruit trees and vines. Irrigation to all. Tourist accommodation (camping only so far). Expansion possibilities unlimited. 50 x 25 timber, and iron shed. Cement floors, complete workshop, ½ living area. S/C stove and HWS, freezer, fridge, auto w/machine dryer etc. Low rates, good roads, school bus, mail, 2 phones, 3 separate power connections. Abundant bird and wildlife. Great GR neighbours. Moving interstate due health. Ph: 079-584-569. Mackay based business optional extra. \$82,000.

VICTORIA

KERANG HISTORIC HOME in good condition situated on 2½ acres with exclusive Loddon River frontage. Permanent water supply from river. Three miles from town with all facilities. \$48,500. Phone 054-522-625 or write to Ken and Maree Hamilton PO Box 303, Kerang 3579.

BUSH BLOCK 20 ACRES. St. Arnaud, two dams and fully fenced \$11,500 negotiable. Ph: 03-398-4755. Weekends or after 6 p.m.

GRASSIFIEDS

PROPERTY FOR SALE

VICTORIA

MOUNT GAMBIER STONE HOUSE on ½ acre block, three bedrooms, kitchen with open fire, and gas cooking, gas hot water, dining room with antique open fireplace, bathroom and toilet indoors, large laundry could be made into another bedroom, roof fully insulated, sanded and polished floor redgum bush feeling indoors. Large garage two Mount Gambier stone outhouses, large chook pen and vegie garden, fruit trees and great view of the hills close to milkbar, hotel and schools complete with phone and electricity priced for quick sale \$28,500 For further details phone Philomena Iddon 055-791-302 or write to High St, MERINO 3310.

SUNRISE FARM, 600 ACRES, is adjacent Mt. Murrindal Reserve and Ontos communities. I have a mud-brick/oregon/pine hexagon style home to sell, time-share arrangement. Genuine enquiries only. AH 03-527-4946.

ASTRONOMERS' SANCTUARY at Kingston (Daylesford/Ballarat). Commuting distance Melbourne. Oceanic sense of harmony from totally renovated 2 or 3-B/R clinker BV traditional cottage. New plumbing, wiring, septic system, 9000 gal concrete tank, all electric kitchen, jarrah benches. 30' x 10' family room with polished wooden floor. Pure wool carpets. OFF's. Fully insulated walls and ceilings, telephone. Situated on 3.25 acres friable soil on side of extinct volcano, magnificent uninteruptable view of surrounding farmland. Nearest neighbour 2 km. \$79,500 negotiable or lease with up to 45 acres if required. Would consider short term holiday rentals. BH 053-311-983 AH 053-456-246 or write 'Toddy's', KINGSTON 3364.

EAST GIPPSLAND, 8 acres rich river flats in remote valley. Potential buyers preferred to have an aversion to cats and not feel threatened by feminism \$10,000. Ph: 051-540-145.

PEACEFUL 55 acre semi bush, red gum country, Chetwynd, 700 mm rainfall, dam, school buses, mail run, SEC, local store. Only \$25,000 Ph: 055-831-573.

SNOWFIELDS — FALLS CREEK 1 hour. Secluded mountain home, good water, soils, orchard, 19 acres. Genuine sale. Vacant possession \$99,000. Ph: 057-575-220.

TASMANIA

TWO YEAR OLD COTTAGE, stone floors, septic, phone, electricity, wood heater, on 4 acres, 10 mins from Launceston. Dam with spring, pumps, tank. Foundations and architects plans for pole house incl. Owners in Qld. Urgent sale. \$33,000 neg. Ph: 079-511-489.

JACKEY'S MARSH (TAS) 27 acres of lush land, 20 minutes from Deloraine. Three to four acres cleared, balance bush. Solid foundations for stone house completed, with cellar provision. Some building materials. Bush shed. Secluded, cleared, site in bush with good tracks. Soil suited for mud bricks. Phone close. School bus, 2 dams, permanent creek with trout. Incredible views of Western Tiers and Quamby Bluff. \$29,000. Ph: Vincent 003-449-226. Also possible adjoining 24 acres with cabin and phone.

NORTH EAST TAS 2-B/R mudbrick post and beam constructed house on 11 acres, 2 acres cleared with large workshop orchard vegetable garden permanent creek. N/NE aspect. Lots of potential. \$32,000. Ph: 003-542-416. C/- PO DERBY 7254.

FINGAL 3-B/R weatherboard house on large block, close to school and shops, 30 mins from coast, floor coverings, curtains and light fittings, wood heater, combustion stove with hot water and electric stove, sheds, fruit trees, garden plots, cement paths. Bargain \$26,000. Ph: 003-742-116 or 003-722-386.

235 ACRES FREEHOLD, Flinders Island. Good 20 x 30 shed, outbuildings, magnificent views. Good water \$28,000 ONO. Ph: 003-599-737.

NORTH EAST ¼ ACRE adjacent state forest. Pole frame and conventional weatherboard, two bedrooms new kitchen, wood and electric stoves, carpets, tank and town water, established gardens. Views of Ben Lomond and Mt. Elephant. PO Box 165, ST. MARYS. Ph: 003-722-149.

OLD WORLD CHARM renovated house centrally located close to beach and township, on one acre comprises of lounge, diningroom, kitchen, featuring natural timber cupboards and walls, sunroom, 3 bedrooms, laundry, bathroom, carport, out buildings. Private B.B.Q. area. Established garden \$68,000. PO Box 121, ST. HELENS 7216.

TASMANIAN NW COAST — large well finished mud brick home 4-B/R plus smaller cottage, tons of rustic character in very secluded setting of tall timbered bushland, good water supply (springs and creeks) phone, power and school bus. All only 12 minutes to Devonport or Ulverstone. Land is about 60 acres with 10 acres cleared, with extra 20 acres if wanted. \$95,000 or \$110,000 the lot. Ph: 004-282-142. Write Ken Bathurst C/- PO FORTH 7310.

CYGNET — 50 acre farm, situated at end of private country lane, just 45 mins drive from Hobart. 3 bedroom, brick colonial style home with blackwood panelled lounge and open fire. Floor heating, established shrub garden. Also original homestead, partly renovated in pine. A 50' x 35' brick and iron shed. Approx 35 acres established pasture, with 3 dams, excellent fencing and ample water supply. \$145,000. Ph: 002-951-516 or 002-278-146.

EAST COAST TASMANIA 30 acres, plenty permanent water, highway frontage, small sea-view, 10 acres pasture, 20 acres natural bush. Good soil easy to work, easterly aspect, five minutes to nearest beach for fishing and swimming. Approx. 8 km to nearest Post Office and shops. \$30,000. Ph: 003-722-459.

FOUR B/R WEATHERBOARD HOUSE with 8 acres, fenced paddocks, near Dover, southern Tasmania. Power and town water connected. Includes 3 open fireplaces, outdoor woodshed and laundry. Backing onto state forest. Property overlooks Esperance River. Price \$47,500. Ph: 002-981-191. PO Box 50, DOVER 7116.

TASMANIA TWENTY ACRES bush plus 'almost finished' house. Shed, tanks, telephone, dams, own power. Twenty minutes Hobart. Unfenced, council access, \$32,000. Ph: 052-613-455.

ALTERNATIVE STYLE HOUSE in Derby N/E TAS on 4 acres. Comes with profitable paint stripping business, vegetable garden, bungalow, heaps of character. \$18,000. Ph: 003-542-416. Quick sale. C/- PO DERBY 7254.

NW COAST HARMONY HOLLOW 25 acres part rainforest, river boundary, adjoins 800 ha forest reserve, volcanic soil, mild climate, 10 min to Burnie 2 min to school, shops. Eleven square owner built log cabin, fully insulated, s/comb stove. Outbuilding inc. 6 square garage. Substantial fences. Near self sufficiency from extensive gardens. Secluded but not isolated. Price includes childrens pet donkey \$69,000. Ph: 004-357-568.

SOUTH AUSTRALIA

FOR SALE IN QUIET SE coastal town. 2-B/R bungalow on large block with view of bay. Landscaped garden. Phone, electricity, bore and 3000 gal rain water. Double carport. Within walking distance of shops, 10 min drive to Beachport, 15 Millicent. Peaceful but not isolated. \$55,000. Ph: 087-356-186.

WEST AUSTRALIA

SOUTH WEST WA share in 320 acre property close to coast, borders national park and deep river, cottage, orchard, septic, gardens, etc. \$20,000 ONO. Ph: 098-401-204 evenings or write T. Jolley C/- PO WALPOLE 6398.

PROPERTY WANTED

HOUSE: low-block, electricity, water, ½-10 acre. Approx. \$30,000. Coastal mid-west Qld. Not large city. Write H. Cleary M.S. 509. SARINA 4737. Ph: 079-562-161.

ACREAGE BORDERING RAINFOREST or along Murray River (west from Wodonga). High rainfall, warm climate. Three bedroom house, power, water, phone, school bus preferred. Please send details photos to W. and M. Hussie, PO Box 328, KATHERINE 5780. Ph: 089-721-742.

OLDER STYLE LARGE dwelling with out-buildings. Rainforest area, close to state forest, waterfall, swimming holes, creeks, dams. Near mountains, sea or river. Rich soil for orchard and vegetables. 10-40 acres health/spiritual centre/retreat holiday centre potential. Nth Queensland, nth NSW preferred. Couple with children sought for joint business venture. P. & G. Davis, 8 Carstairs Rd, DARLINGTON 6070.

THREE TO FOUR BEDROOM solid home. verandahs, garage, sheds, suitable raising chooks, vegies, children. Running creek/bore, phone, town water, power, solar/generator connections, fireplaces, wood stove and or gas, garden areas, trees, no flooding outside any town limits, 1 hour coast and speedway. Tasmania, Victoria, southern/coastal NSW, southeastern SA, G. Tuddenham, PO Box 3967, ALICE SPRINGS 5750.

LAND FOR SMALL CROPS, bees etc. in exchange for caretaking, labour, low rent, share of profits from early 1988. Reliable middle aged couple. Prefer northern NSW or QLD. Looking for long term arrangement. Carolyn, PO Box 241, WODEN 2606.

GRASSIFIEDS

PROPERTY WANTED

NTH NSW, QLD 20 acres with dwelling to buy to \$30,000. Married couple, small child. Husband experienced in farming and factory work, seeks employment also. Ph: 02-684-1736.

URGENTLY WANTED FOR OCTOBER, rent or rent/buy. Farm, cottage Northern NSW coastal area by young married couple for settled birth of first child. Farming experience, wife self employed required electricity/water. Please write A.S.A.P. Andrew Kimpton, C/O 251 Chapple St, BROKEN HILL 2880.

COMMUNITIES

SOUTH COAST 20 acres half share of 40, tenants in common, surrounded by state forest, western boundary Tinpot flora reserve, dwelling, no electricity, fire shelter, quarter acre cleared, rest forest, access to river, nearest town Cobargo 20 km. \$22,000 ONO. Enquiries A. Snell, 67 Railway Ave, BUNDANOON 2578.

SHARE IN MANDALA community. SE QLD, house with views, power, phone, septic, school buses. Vendor finance available. \$32,000. Malcolm Roach, 181 Russell St, TOOWOOMBA 4350. Ph: 076-323-176.

SPIRITUAL AND ENVIRONMENTALLY aware people needed to establish healing community in central Victoria. Land available. Ring Ross on 03-754-7833 or write 'Twahamwe', 376 Glenfern Rd, UPWEY 3158.

LILLIFIELD COMMUNITY — a total of forty-one shares at \$13,800 each in a council approved multiple occupancy (about half already sold). Location: 15 km west of Nimbin on the Kyogle — Murwillumbah Rd. Each share gives legal entitlement to approximately four to five acres as well as a share in over 100 acres of common land for environmentally sound recreational and agricultural purposes. There is a choice of flat land, high land and valleys, gentle slopes, with creeks and streams. The Community House main structure has been completed, there are gravel roads, dams for water supply and swimming, a tractor and various implements for community use, and the local Rudolf Steiner School is located on adjoining land. Our aim is for a community of people who will respect this beautiful land as well as each other. If this appeals to you please write to: 'Lillifield', LILLIAN ROCK VIA NIMBIN, 2480, or phone 066-897-224.

MOUNTAIN COUNTRY, 587 acres, 10 km Comboyne ¼ hour Port Macquarie, 40 percent rainforest, rest open forest with grazing. There are good creeks, river, soil, waterfalls, rainfall, homesites, plus wonderful views with good aspect, 25 acres per share, 3 sold, 3 left at \$12,500 each. Ph: 065-534-028.

SHARE FOR SALE in rural co-op Dorrigo Plateau bordering Nymboida River and state forest, small wood house with dam, HWS, solar system \$12,000. Ph: 02-981-2559.

ONE THIRD SHARE in 100 acres, far south NSW. Temporary dwelling, large fenced garden, some fruit trees, dam. Good access, phone, no power. Property is half bush, half regen, fairly hilly, close to state forest, thirty min from Bega \$15,000. Jackie Miles C/- PO BEGA 2550. Ph: 064-927-285.

TWO B/R HOME, two years old on own hectare on community at Maryvale, east of Warwick. Power, phone, school buses, large shed, excellent water supply, furnished \$35,000. Write Bell MS 937, ROSEDALE 4674.

NIMBIN NORTHERN NSW — shares in beautiful 360 acre property. Forested slopes and fertile creek flats. Wide creek with waterholes along boundary. The shares are up to 10 acres and are some of the few fully approved shares available. Shareholders are eligible for first home owners grants. Access is 2WD all weather and shares are fed by a gravity water system. The shares have been selected for privacy and are surveyed. Use of common land, rainforest area, wonderful wildlife and flora \$13,000. For details and photos contact Mark Taranto, C/- PO NIMBIN 2480.

BELLINGEN ONE FIFTEENTH SHARE and well-built timber house on established 165 acre community on Bellinger River. Power, phone, water, mixed orchard permanent creek, north aspect, close to Steiner school. \$35,000. Ph: 066-551-353.

MARGARET RIVER — close to coast, undulating, rich soil, 5 acre home site, 20th share, 50 acres common. \$12,000, some vendor finance available. Geoff, 13 Jeanes Rd, KARRINUP 6018.

ONE TWENTYFOURTH SHARE in community and retreat centre near Kyogle, northern NSW. 1000 acres forest and pasture, permanent creeks and springs, approved development, \$15,500 neg., carries 5 acre dwelling entitlement and share in community house and tractor. Contact Dave 066-624-335 or Sue 066-230-600 BH.

VALUE: SHARE IN 200 idyllic acres 13 miles from Bowraville on the mid-north coast NSW. Two bedroom timber home with power, phone etc. Large workshop and double carport in picturesque setting, all conveniences. Plus a sixth share in 4 bedroom co-op house, tractor, farm equipment, stock and many extras. Must sell \$40,000 ONO. Ph: 065-698-022.

WANTED PEOPLE to share co-op property in Northland New Zealand. Involved in rebirthing, massage, personal (esp kids) development and all aspects of fulfilling life. Bardahl, 49 Heaslip St, WOLLONGONG 2500. Ph: 042-272-392.

CHRISTIAN MULTIPLE OCCUPANCY. Seven shares NE NSW, 20 km Lismore for committed Christians interested in cottage industries small scale farming, 60 acres lightly timbered, 90 acres pasture hilly and frost free NE aspect. Priced at \$10,000 each share is one to five acres included is use of four wheel drive tractor buildings etc. D. & D. Bacon, Cawongla Rd, ROCK VALLEY 2480.

BUSINESS FOR SALE

RIDING SCHOOL ideally situated scenic Bundanoon NSW southern highlands one acre, 10 stables holding yards. Two year old barn, living area in loft, sewerage, water, phone, 5 acre in town, 99 year lease various paddocks around town 'free'. Nine horses and tack, sulkys, chuckwagon, heavy horses optional suit GR family private sale \$55,000. Phone Phil 048-836-542.

IF YOU WOULD LIKE TO CONTRIBUTE to the growing awareness and demand for good food, then this shop can offer you a place to do that. We are serving the Blue Mountains area with organic fruit and vegetables plus a full range of natural healthy foods — NO vitamin pills or supplements. We also stock a small range of philosophical, children's and selected books, wooden toys, handcrafted shoes and woollens. Established for 3 years with lots of hard work, love and care — now its time for us to move on. \$34,000 includes SAV, fixtures and fittings plus a faithful regular clientele. For information phone Marcel or Janette on BH 047-573-222 AH 047-591-294.

TROPICAL FRUIT FARM with nine rented houses, 8 HA F/H near Cardwell mid-way between Cairns, Townsville guaranteed income, nine rented houses, 4 ha bananas, 1 ha paw-paws, irrigated, permanent creek. Large packing machinery shed. Two tractors, 7 ton truck, implements official valuation \$330,000 sale price \$220,000. Ph: 070-668-852.

SMALL BUSINESS SHOP with 3 B/R house at rear plus share allotment adjoining with ex-service station building and driveway on. Large allotment shed at rear both allotments only 100 m from ocean situated at Wyndham Port in the Kimberleys. Will sell lot \$38,000 plus SAV. Genuine reason for selling. Contact owner 091-611-364.

ESTABLISHED CHIMNEY/STEEL flue cleaning business for sale in Orange. Excellent returns, room for expansion, low overheads, can be operated from home. No opposition, willing to give some training, \$15,000 negotiable. For further details feel free to call Lachlan on 063-628-706.

OPPORTUNITY EXISTS for person to buy business in tropical NQ. Very low overheads, experience not necessary (full training given free). Work involves tree surgery, lopping, felling etc. Many other options available to build business into \$40,000 + pa. Currently \$30,000 pa. Govt. contracts. POA to serious. Moving interstate due health. Ph: 079-584-569.

ORGANIC FARMSHOP on Atherton tableland F.N.Q. stacks of potential beautiful natural area beautiful town about \$50,000 stock \$35,000 business and plant good premises main street great two person business. Ph: 070-976-360. AH: 070-976-398.

PARTNERSHIP AVAILABLE. Book shop in Huon Valley, southern Tasmania. Established six years, new and second hand, trading 5½ days a week. Ph: 002-641-730 or 002-663-396.

COFFEE LOUNGE/RESTAURANT NW coast Tas. Trading profitably 5 days per week. Suitable for family or mother/daughter. Excellent tourist growth potential. Substantial goodwill, modern plant and equipment. Vendor finance \$40,000 W.I.W.O. Ph: 004-357-568.

EAT IN TAKE AWAY HEALTH CAFE situated on NE coast, Byron Bay. This business offers a steady flow of loyal clientele, located metres from main beach front with pleasant outdoor eating area. Unlimited potential for extensions and further development. Keen to sell, asking \$18,000 — stock inc. Ph: 066-857-966 (BH).

GRASSIFIEDS

BUSINESS FOR SALE

HEALTH FOOD SHOP in main street growing tourist town. Low rent and separate 2-B/R house on large block. Small orchard. Business and house in top condition. For more details write P. Lanham, 70 John St, COONABARA-BRAN 2357. Ph: 068-422-140 (BH).

TO RENT

FARMHOUSE 600 ACRES, one vegetarian only. Gloucester Taree area \$30 week rent. Ph: 049-24345.

ASTRONOMERS' SANCTUARY refer our advert under property for sale, Victoria. Ph: 053-311-983.

WANTED TO RENT or caretake: house in peaceful bushland or wilderness, preferably in NSW, mod cons not necessary. Don Westlake, 75 James Scott Cres, LEMON TREE PASSAGE 2301.

OPPORTUNITIES

COMMITTED CHRISTIANS REQUIRED at non-profit privately owned youth camp at Toogoolawah (doctor, school etc.) 1.5 hours Bris. Single (over 18 yrs) accommodation \$40/week full board or couple (children welcome) with caravan \$10/week to share a vision by lending us a hand. Casual catering and local vegie picking etc. available. Love of animals and youth essential. References please. 'Cross Country Station' MS 336, TOOGLOLAH 4313. Ph: 075-831-278.

FREE ACCOMMODATION in exchange for child minding occasionally and help in an organic garden. Provide country living, swimming pool, good living. Write to: 'Old Schoolhouse', Rocksberg MS 1406, UPPER CABOOL-TURE 4510.

SYDNEY BASE. Fifteen minutes from town. Furnished room in potters' (59) federation house, with piano. \$65 per week. Write to Gwen C/- Clayworkers Gallery, 2 Darghan St, GLEBE 2037.

CHRISTIAN FAMILY with four children (oldest 10) leaving Melbourne September for around Australia caravanning adventure. 'Dad', a teacher/electrician/builder/handyman needs work — particularly like farm work, caretaking, helping anywhere. Contact: 94/2 Old Stud Rd, WANTIRNA 3152. Ph: 03-222-3558.

SHOP IN MELBOURNE seeks direct suppliers of quality Australian made products (soaps, herbal and potpourri products, handicrafts, pottery etc). Please write to S. Yong, 8 Christina Close, WHEELERS HILL 3150.

WANTED — CHANCE to combine bicycle tour of New Zealand and stopovers with GR minded NZ people, Nov/Dec 1987. I will work or pay for my keep. I will answer all replies. Ross Hufton, 11 Tergur Cres, CARINGBAH 2229.

MAKE EXTRA CASH. This is a genuine opportunity selling handpainted craftwork. For no obligation information contact Kirsty Maude, 54 Enmore St, TRANGIE 2823.

PARTNERSHIP REQUIRED established dairy farm. R.A. Doolan, 29 Warrina Cres, BURLEIGH HEADS 4220. Ph: 075-351-851.

I AM LOOKING FOR OTHER CREATIVE BEINGS (several) moving in a detached manner from worldly consumption, conquests & fixations, with similar (or rather not too dissimilar), practical, personal and spiritual compulsion, skills and temperament, with, (as in my own case) a longing to create, explore human potential, in conjunction form a body or core of individuals to afford some more of this country before it goes under the hammer for some other idiotic purpose. I would particularly like to hear from other single persons, financial and/or skilled longing to move into a broader spectrum of creativity, continuity and humanities. At present I have a property which I can turn over for fifty possibly sixty thousand dollars. Basic script of my being: bricklayer builder by trade, other skills architectural drafting, pure arts, design, stone-masonry, some carpentry and farming. Interests are humanities, literature (Buddhists, any literature of A. Huxley) vegetarianism, wildlife, natural healing, alternative powers, spiritual understanding, boats, sculpture, laughing, sleeping. Born 19.12.53 Dutch ancestry, upbringing was consistently close to Australian bush and fortunately not too traumatic. Weakness — limited knowledge of modern tech. mechanics, and my back. Particular dislikes: liars and laziness (spiritual). All contacts coming from good heart source answered in same manner. Best wishes and liberty. Contact Casey. Ph: 03-818-7555 write — Casey 34 Edgevale St, HAWTHORN 3101.

GARDEN AND ORCHARD

PROPAGATE YOUR OWN TREES from seed, over 200 species stocked — carob, tree lucerne, honey locusts, eucalypts, acacias, etc. For descriptive seedlist send two 36¢ stamps to Central Seeds (GR) R.S.D. LOCKWOOD 3551.

SEEDS, ORIENTAL VEGIES, FRUITS, herbs, flowers, suited to sub tropics, 50¢ packet. For list send 2 stamps to Lorraine Blaney, PO BEACHMERE 4510.

HONEY LOCUST SEED, start now for spring \$10, 60 seeds. Postage and information included. Yarralaw Shade & Fodder Trees, Yarralaw Rd, BUNGONIA 2580.

TREES — Tagasaste, leucaena, tubestock \$30/50 \$50/100 incl. freight NSW, QLD Honey locust, kurrajong \$1.20, others on request. Write Col Freeman 'Corinda' MONGOGARIE 2470.

ORGANICALLY GROWN HAZELNUT suckers for sale 1-4 years old, good roots. John Ozolins, 5 Mitchell Crt, NOBLE PARK 3174. Ph: 03-546-6747.

FOOD AND KITCHEN

HOME STONE FLOUR MILLS: Mill your own stoneground wholemeal flour for cakes and bread at home with a Retsel Little Ark Stone Flour Mill. 'Endorsed by Housewives Association'. Write for catalogues to: Retsel Distributors P.O. Box 712, DANDENONG 3175, enclosing three postage stamps or Ph: 03-795-2725. Distributor enquiries welcome.

PURE DRIED BEE POLLEN, 100 percent free of agricultural sprays, 425 g pack \$8 posted. Island Bees, PMB Althorpe Isle, COWANDILLA 5033.

WANTED

WANTED HOUSE AND LAND to rent with possibility of purchase preferably in NSW. But will consider anywhere reasonable, or alternatively just long term lease. We are a small family looking for room to grow. Will supply references. Garry Robertson, 38 Westwood St. PENNANT HILLS 2120.

TWO COUPLES LOOKING for two adjoining five acres and up or 1 large acreage possibility sub must have creek or dam up to \$35,000 each couple. Within 30 km around Murwillumbah. Write or Ph: 049-873-892, 21 Watt St, RAYMOND TERRACE 2324.

URGENTLY WANTED, few kilos of Bunya Pine nuts. Please state your price. B. Marinovic, 66 Crown St, WOLLONGONG 2500.

NATIVE PLANT materials, wattle blossom, gum nuts, etc. All types, fully dried, native materials considered. Large quantities preferred. Good prices plus freight paid. Contact: Peter Hunt, P.O. Box 53, NORTHCOTE 3070. Ph: 03-489-8405.

FAMILY OF THREE, he 29, she 30, bub 1½ and assorted animals seek 2-B/R dwelling on small or large acreage. Within ½ hour Toronto. Have references can pay realistic rent or caretake. Consider any offers PO Box 166, TORONTO 2283.

CALENDAR EVENTS

THE ORGANIC GROWERS' ASSOCIATION of NSW is holding an Organic Know-How Education Day on 29 Nov, 1987 at 'Sunset Vista' Organic Farm, 17 Francis St, Bringelly — between Camden and Penrith (Ph: 047-748-146). A full and interesting day is planned including the attendance of speakers Graham and Sandra Ross, horticulturists and Albert Wilcox, a broad acre mixed farmer. Speakers will discuss various subjects relating to the growing of food organically. There will be workshops and demonstrations, including a food preparation demonstration. Enquiries J. Lubke, PO Box 2, BRINGELLY 2171.

DR MALCOLM STUART editor of *Herbs and Herbalism* of Cambridge and Gilian Painter author of *Unusual and Old-fashioned Plants*, NZ are key-note speakers at the first Australian international herb conference in April 1988. For details write to PO Box 13, CLAYTON 3168.

HOLIDAYS

FASTING FOR HEALTH and rejuvenation, vitality — longevity, Natura weight correction, meditation — reflexology. Away from city smog in cosy country retreat. Write or phone to Koorngal, Three Bridges via YARRA JUNCTION 3797.

TRADITIONAL SHEEP STATION holiday. Horse riding, kids activities, swimming, sand-hill tobogganing, self sufficient. Linen provided. Wentworth, Mildura, Broken Hill within easy driving. Accommodates up to 10 \$130 weekly. Ph: 050-270-210, Cunningham, 'Nindethana' via WENTWORTH 2648.

BICYCLE TOURS OF NEW ZEALAND — we feature biodynamic, organic farms and provide all cyclist's services. PO Box 11-296, AUCKLAND 5. Ph: 591-961.

HOLIDAYS

WE HAVE A NICE GUEST HOUSE with all amenities in Tenterfield in the Northern Tablelands near the Queensland border. It is ideal for people wanting a quiet holiday or to recuperate after an illness or just to recharge, body and soul. The rates are very reasonable; 3 first class meals a day plus morning and afternoon teas for 7 days is \$100 or less for any consecutive weeks. Special rates and attention for aged pensioners. Vegetarians catered for, with healthy meals. We are a GR family; caring and will ensure guests are well taken care of. Nice drives in the area for those with cars. Train service and daily bus services. Further information from L. McCabe, prop. on 067-361-232.

'KERSBROOK' HOST FARM. Beautiful, colonial-style accommodation, family atmosphere, home-made bread. One room with double and single, one double room. Dinner by arrangement. Member Country Accommodation Association. Ph: 003-542-418.

LA MANCHA HEALTH Centre Wollongbar, NSW, 2480. Motel-like accommodation. Beautiful rural environment. Special from \$165 pw. Directed by Matthew Steele, dietician and author. Phone or write for brochure. 066-295-138.

LIVESTOCK

PIGS, SADDLEBACK and Berkshire purebred weaners always available. Make wonderful mothers and do not sunburn. Advice and information sheet available. D. Cheetham, Rockmount Stud, Balgownie Rd, SOUTH-BROOK 4352. Ph: 076-910-204.

FOR SALE DUE TO LOSS OF AGISTMENT, one 6 year old registered donkey gelding 11.3hh. Fully trained, (harness, ride, snig) no vices, quiet and willing, loves work and children, suit farm or market garden, strong and healthy, vaccinated and wormed. Prefer knowledgeable home \$250.00. Write to O. Francisca, 1 Base Wksp. Bn. Apollo Rd, BULIMBA, QLD 4171. (Include phone no).

BEEES. Gentle productive Italians. Queens \$6.00 ea. 10 + \$5.50 ea. Nucleus colonies \$30.00 ea. Box \$8.00 freight extra. For all orders paid for by 31st August deduct 10% discount. Patrick Carroll, Lot 7, Milford Rd, LONDONDERRY 2753. Ph: 045-725-560.

KHAKI CAMPBELL DUCKS. Top layers \$20 breeding trio or \$7 per layer. P. J. Jasper, Thyra, RMB 190, MOAMA 2739. Ph: 054-893-233.

QUIET HOUSE COWS with calf hand reared organically, various breeds. Ph: 051-540-120.

PRODUCE YOUR OWN HONEY! A hive of Honey Bees in your garden can double the yield of your fruit trees and vegetables and you can have delicious honey as well! A fascinating hobby suited to all ages. Basic hive, ready assembled and painted — \$60; bees, \$30 extra. Complete beginner's outfit with all necessary gear, bees and instructions — \$130 FOB Londonderry. Send for details to: BB Honey Products, 125R The Northern Road, LONDONDERRY 2753. Ph: 047-77-4866.

TOGGENBURG BUCK, 8 months old. Unregistered but from excellent milking strain. Ideal for small herd. Free to a good home. Ph: 063-642-227.

GRASSIFIEDS

IRISH DONKEY, 3 years old childrens pet. Owners moving to town. Sale to genuine animal lovers. Price neg. 004-357-568.

HANDCRAFTS

FAMILY TREE QUILTS, embroidered centre panel surrounded by machined patchwork with four loops for easy hanging. For more information about this original design, send SAE to: Rita Summers, 'Kersbrook Nursery Crafts', Gladstone Rd, PIONEER 7254.

ESSENTIAL OILS potpourri and natural products — for aromatherapy and craft work. We are the manufacturers of raw materials for making massage oils, soaps, cosmetics and household products. Our extensive range includes: essential oils, absolutes, fragrances, vegetable oils, gums, waxes, extracts, potpourri, herbs, spices, essences, pottery and containers. Buy from us direct, small or bulk sizes, and save with our low prices. Send stamp for free catalogue to Auroma, PO Box 187, RICHMOND 3121 or call in at 22 Mount St, PRAHRAN 3181.

DESIGN YOUR OWN KNITTING PATTERNS for 'Homespun'. 12 p. booklet. \$3.50 each (includes postage). \$2.00 each for orders of 10 or more (plus \$2.00 postage): 9 Hamilton Ave. PT. LINCOLN 5606.

COLOURED WOOL natural commercially spun. Grey, white, brown, 12 ply, 8 ply. \$34.80 per 28 oz. (one jumper lot) plus postage. Also coloured fleeces for hand spinning. More information from Newstead Pottery, Daylesford Rd, NEWSTEAD 3462.

POTPOURRI & SACHET SUPPLIES. We have the largest range of materials for fragrant craft work at the lowest prices in Australia — economy and traditional potpourris, flowers, herbs, spices, essential oils, fragrant pots, drawer liners, sachets, pomander balls, fragrant gift lines, craft board stiffeners, books and much more. We simply are the biggest in the country, but cater to all requirements, the beginner to the chain store. Write for free mail order catalogue, Potpourri & Sachet Supplies, PO Box 53G, NORTHCOTE 3070. Ph: 03-489-8405.

SERVICES OFFERED

FLOWER ESSENCES a natural way to wholistic healing. We have available an extensive range of essences. Stock bottles \$2 each. Individual remedies are also available including the Bach Flower Remedies. Send 2 stamps for details to Natural Flower Remedies, PO Box 1796, MACCLESFIELD 5153.

HAWKESBURY FARM AND GARDEN service, horticultural advice and services. Planning, design, land assessment, orchards, crop care, tree surgery, tree care, landscaping, garden improvements, technical advice. Can teach skills if required. M. Carey, Qualified Agri-ulturist 045-765-703.

MAKE YOUR OWN BRICKS and save; moulds for standard, pathing and the unique mortarless lockable bricks. Our special fibre-glass moulds are inexpensive, easy and quick to use with mould turnaround of seconds; about 150 standard bricks to each bag of cement or around 4c each. SAE for full details. 'Dick and Betty', 5 Terrace Falls Road, HAZELBROOK 2779.

NUMBY NUMBY EARTHWORMS — breeders and suppliers of live earthworms for gardening, composting, horticulture and breeding stock. Our 'Speedy Breeder Compost Worm' revolutionises your compost and transforms your garden. Just \$18 per 1000 worms, includes postage Australia wide and instructions. Numby Numby Earthworms, ROLLAND PLAINS 2441. Ph: 065-858-239.

WONDERFUL WORLD OF HERBS: planning and starting a successful business. Name address and 37¢ stamp to: ATEC, PO Box 110, LEURA 2781.

PUBLICATIONS

COSMIC CONFLICT is a book that unveils the very powerful forces involved in a deadly struggle for planet Earth. The evil one doesn't have a pitchfork but his evil cunning is too deceptive unless you know his methods. Read how he has worked in the 2000 years past and read how Jesus Christ the lovely hero has said it would end. This book will help you to be on the winning side. Order from A. Zujic, PO THULIMBAH 4376, \$4 post paid.

ANIMAL FRIENDS, quarterly, the magazine for all who love animals. If you share your life with an animal friend this is the magazine for you. Regular features include veterinary column, book reviews, young people's page, lively letter pages plus factual and entertaining features. *Animal Friends* is only \$6 a year. *Animal Friends*, 40 Northam Rd, EAST BENTLEIGH 3165.

TRANQUILITY AND INSIGHT by A. Sole-Leris. The author investigates the theory and practise of Buddhist meditation techniques including Vipassana. A comprehensive introduction to and explanation of Buddhist concepts. Send \$18.00 post paid to Helen Dawson, PO Box 305, KATOOMBA 2785 or phone 047-841-408 to order.

LOW-COST OWNER BUILDER OCTAGONS — a comprehensive manual, \$2 direct from builder designer. Appleby, MS316, NEERDIE 4570.

THE STRAW AND SALT SOCIETY (Australian chapter). *Seasalt's Hidden Powers*, book by Jacques de Langre, is obtainable from the Society. C/- PO PIONEER 7254. Cost \$10 incl. post. SAE for Society information.

DO YOU KNOW the right way to thread a needle to prevent twisting and knotting? The answer is in my stretch sewing manual only \$3.40 posted. Jill Mitchell, 12 Mullacor St, FERNY GROVE 4055.

INITIATION INTO GENUINE MAGIC by Franz Bardon. More details (SAE) from HERMETICS, PO Box 84, WEST END 4101.

HOW TO INVEST in real estate, little or no money required to start. For this informative booklet post \$20 to PO Box 45, HACKETT 2602.

FANCY FOWL is devoted to articles and news items connected with breeding and exhibiting all types of fowl, including waterfowl. The journal is available on an annual subscription through Australian Agent, Ken Bergin, PO Box 5, SUMMER HILL 2130. The rates are as follows: Surface Mail \$22.00; Air Mail \$30.00.

GRASSIFIEDS

PUBLICATIONS

AUSTRALIAN SMALL FARMS HANDBOOK — new edition out now. Where to get products like pumps, wind generators, solar cells, seeds, livestock (including bees & earthworms), and stockfeed, organic supplies as well as chemicals & fertilisers; information on breeding deer or growing nuts; courses in farming skills; helpful groups and organisations from Permaculture to Agriculture Depts. Listings cover all states; reviews of books & magazines and a calendar of Field Days and shows. All this for \$12.95 (plus \$1.50 post) from Second Back Row Press, PO Box 43, LEURA 2780.

TURKEY TALK — a bi-monthly newsletter for the small-scale turkey breeder and pure breeds fancier. Subscription \$12.00 per year. Sixth issue available now from Night Owl Publishers, Box 764, SHEPPARTON 3630.

COOKING WITH LOVE, wholefoods recipes for babies and children by Christine Hepworth. All natural, no sugar or red meat used. Available from the Author. PO Box 69, LAWSON 2783, \$5 post paid.

'WHO TEACHES WHO?' is a collection of humorous stories of teaching in earlier days. Excellent gift for overseas. \$5.00 including postage. Adnew Books, 40 Northam Rd, EAST BENTLEIGH 3165.

BIODYNAMICS an advanced organic approach to gardening and farming, to rejuvenate planet earth. Send name, address and 36¢ stamp to: Atec, PO Box 110, LEURA 2781 for latest catalogue.

CLUBS AND SOCIETIES

THE AUSTRALIAN HERB SOCIETY. Join now, members receive quarterly magazine, free seeds, access to extensive tape library. For application forms write to PO Box 110, MAPLETON 4560.

LET'S GROW GARDEN CLUB. A new correspondence club, with Glen Heyne and John Mason. Benefits include: quarterly newsletters; mail order catalogue; exclusive plant and seed collections; workshops, courses, tours and holidays; special discounts on books, tools products etc. Send \$10 annual subscription to 'Let's Grow', The Garden Cottage, Malmsbury Rd, DAYLESFORD 3460.

COURSES

DR DON GRAY BIBLE TEACHER, offers free 12 lesson course on a sane approach to Christianity in an insane world. For details please write PO BENTLEY, 2480, 066-635-213.

MISCELLANEOUS

HEALTH PRODUCTS AND BOOKS at wholesale prices. I have closed my shop because of a transfer and am selling my remaining stock at cost. Please send for list to: Mrs Eris Faul, PO Box 1094, ARMIDALE 2350.

HOME WASTE ecology system. Use mother nature's own processor. Turn your household & garden waste into a natural organic fertiliser. Full instructions plus 2000 worms & eggs for \$30. Goulburn Valley Earthworms, RMB 2357, TATURA 3616. Ph: 058-290-114, 058-290-290.

COCKROACHES, birth control sterilisation of roaches by the inventor of the human birth control pill. Dr Carl Djerassi USA Gencor sterilizes and prevents breeding of roaches without any dangerous chemicals or poisons. Natural death to ingestations with four months protection. One gallon mix for \$30. Linforth and Associates, PO Box 380, AIRLIE BEACH 4802. Ph: 079-467-315 AH.

ARMAGEDDON: who makes up the remnant to be saved? These and other topics of present truth explained. For details write to Dr Don Gray, PO BENTLEY 2480. Ph: 066-635-213.

PAST COPIES OF GRASS ROOTS for sale. Excellent condition. Numbers one to sixty (number nine missing) \$110 the lot. Pay postage if required. Terry Stokes, 68 LLOYD St, WEST HEIDELBERG 3081.

AROMATHERAPY OILS FOR HEALING and also for massage. Blended by diploma qualified aromatherapist. Includes my famous psoriasis oil! Send 37c stamp for details to Steve Lawrence, PO Box 540, BALWYN NORTH 3104.

NATURAL PRODUCTS. Essential and fragrance oils, body oils, herbal remedies and creams, flower remedies, shampoos, cosmetics, pet care. SAE for list. Schoolhouse Farm, Paynes Crossing, VIA BROKE 2330.

BODY BASICS a complete range of handmade bodycare products including soaps, bath oils, lotions etc. All are made to the highest standards of quality using pure ingredients, based on traditional natural recipes. No animals have suffered in their creation. Write or phone for information brochure. Body Basics, PO Box 542, PADDINGTON 2021. Ph: 02-335-753.

FLOWER ESSENCE CARDS for inspiration or greeting. Each is handmade and contains affirmations attuned to the flower's healing essence. Ideal to complement remedies or send to a friend. \$2.50 each. Send S.A.E for details to Box 24, FLAXLEY 5153.

CHILDBIRTH PRICE LIST: Birth Rediscovered video \$90.00, 16 mm film \$800, hire: \$25.00. Birth Can be Natural video (1½ hr) \$25.00 (3 hr) \$80.00 postage extra. Responsible Homebirth \$4.25 booklet: Thoughts on Women's Issues \$3.00 cassette: Relaxation and Breathing for Natural Birth: \$6.00 postage included. See display ad this issue. Orders to: Henny Ligtermoet, 1A Shoalwater Rd, SHOALWATER 6169. Ph: 095-272-033.

INVERTERS AMERICAN MADE modified Sinewave, 12V DC input, 240V AC output. 1000W x 2 \$1440. 1000W x 3 \$1640. 1200W x 3 \$1925. 24V DC input, 2500W output x 4 \$3479. Honeywell Rotary inverter 12V DC input 240V AC Sinewave output. 400W \$450. Battery protector 12V 20amps \$83. Solar regulator 24V 30amps \$220. Digital volt and amp meter for solar 12V, 24V 30amps, \$392. Solarmodule 9W \$199. Fluorescent lights, 12V 8W \$15 — 10 for \$10, 12V 20W from \$48 to \$75, various types. Heavyduty industrial battery charger input 240V AC, output suit 24V battery pack, charge rate max 30amps tapered, \$595. Cheap 12V 500VA Sqwave inverter \$395. Freight extra. Write to: Photovoltiac, PO Box 343, KEMPSEY 2440. Ph: 065-668-009.

FABRELLA IS HERE! send 37c stamp for details 'Ultimate Care' herbals, Fabrella soil and stain repellent and fantastic Fabrella 101 permanent nonstick coating! Full and part time distributors required. Write to Steve Lawrence, PO Box 540, BALWYN NORTH 3104.

GRASS ROOTS nos 54-57, Bumper Book, Fireside Reader \$15 the lot. Four volumes Craft Australia \$12, 10 volumes Craft Monthly \$15, 7 volumes Hand Made \$16. Ph: 02-863-684.

MINI WORM FARM KITS, 1500 plus worms, bedding, egg capsules, with full instructions, in a self sufficient breeding container, allowing a continual supply for compost gardens, bird and fish food, \$25.00 plus \$3.50 for postage to nearest railway station. Sydney Worm Supplies, 1 Clanville Rd, ROSEVILLE 2069. Ph: 02-461-414.

HERB TEA (12 herbs) \$3 — 50¢ post paid. Gem Gert and Erwin Moeckel, Falls Creek, TUENA 2583.

CONTACTS

SINGLE MALE (29), 190 cm, slim, bohemian, loathes burning tobacco, moderate to drinking, non-religious, enjoys planning an autonomous lifestyle, animals, permaculture, good food, music, massage, being an Aries and conversation, sense of humour. If you consider yourself attractive, not too cynical, share some of the above and are a Gemini, Sagittarius or Aquarius lady, contact B.J. RMB 8145, LARPENT 3249.

SEEKING LADY COMPANION to live aboard 50 foot yacht with all mod cons. Lady should be 30 to 45 years with no ties. She should be genuine, experienced or willing to learn. I'm 45 years old with independent means. Happy Wanderer, C/- Lot 10 Kimbriki Rd, BURRELL CREEK 2429.

WANTED: FEMALE interested in growing vegies, sprouts, etc. and some house work for 49 y.o. male and teenage son in return for free food and bungalow, non smoker, vegetarian preferred. Child welcome. Bill, C/- PO WANGARATTA 3677.

HI, DIVORCING MUM (33), son four wishing to meet sole dad, view to share home and happiness. I'm honest reliable and down to earth. Suited to grassroots lifestyle. Enjoy cooking, camping, gardening, music, painting, swimming and fishing, a social smoker and drinker. Regards Lisa, 16 Dalton Drive, ARMIDALE 2350.

MALE (29) ENJOYS THE OUTDOOR LIFE, bush walking and camping also wood turning and writing would like to meet and correspond with lady who has a good sense of humour and easy to get along with. Please reply to PO Box 337, CLOVERDALE 6105.

MAN (39) LIVING ON A BEAUTIFUL PIECE OF LAND on the NSW North Coast. I am an aspiring potter, building a house. I seek correspondence with women who could share this with me if we are compatible. Ted, RMB 84, Pappinbarra Rd, PAPPINBARRA 2446.

63 YEAR OLD service pensioner likes walking, country music and fresh air. Looking for honest lady interested in native plants, who would like to find peace and happiness in a nice environment. William Gordon, 78A Eucalyptus Rd, KINGLAKE 3763.

CONTACTS

LONELY BUT HAPPY PISCES LADY 5' 8½" tall, slim, non-smoker 48 years young, living SE Qld. Would love to meet an honest compassionate secure humorous male to 55. Someone who also loves country life, horses, travelling, growing things and artistic pursuits. Future togetherness and laughter is my dream, are you a dreamer too? Joy, C/- Holstein Park Stud, TOOGOOLOO 4313.

GENT YOUNG (54) 5' 7" divorced five years. Intelligent non smoker affectionate good sense of humour, staff position, own house. Seeks articulate, warm, nature lover to share camping, canoeing, simple pleasures a no frills own eyebrows partner 30 to 50 years. Write Aries C/- PO Box 2080, MT. ISA 4825.

LATE STARTER, bachelor guy 44 trying to settle down to semi retirement in rural setting South Coast NSW. Would welcome some female correspondence. Financially solvent, fit, healthy, presentable, cooking terrible, house trained, street wise, survivor 14 years would travel 10 years own business and 4 marathons. Main interest is life, finding out by oneself no advisor. In addition having a healthy lifestyle, bush/beach walks, travel, computers, current affairs, light classical music and what ever takes my fancy tomorrow. I avoid smokers and born again types, apart from that I have no preconceived ideas on who should reply. Roger Croft, 11 Surf St, LAKE TABOURIE 2539.

NUDIST MALE ON 5 ACRES Brisbane Valley seeks young female companion on S.S. interested in nudist activities colour photography reply DHS, PO Box 88, ESK 4312.

ASPIRING POET mother of two seeks friendships with other poets, aspiring writers in Sydney area. Will write to others. L. Milston, 32 The Battlement, CASTLECRAG 2068.

FAMILY MOVING to outskirts Hobart wishes to share living costs, lifestyle and family commitment with mature woman. Prefer non smoker/non drinker prepared to help in small wholefood and guest accommodation business. Ph: 004-357-568.

POTENTIAL FATHERS: I would like to meet someone who would like to have children. I'm tall dark and most say, good looking. Love reading and intelligent conversation. Music, art and food are important. More interested in compassion and humour than expensive possessions. Like NSW (especially South Coast) and would be prepared to travel to meet someone. C.M.M. PO Box 358, WARRNAMBOOL 3280.

SINGLE DAD seeks caring female 30ish to share house on 25 acres. Please write Terry Quinn M/S 628, MILLMERRAN 4357.

INTELLIGENT WELL-EDUCATED GENT mid-40's, seeks independent lady 30-40 capable of many things. I live in a small country town, own and operate a bookshop, and would like to share this and my dreams with you. Bruno Sharpe, Octagon Bookshop, Day Ave, OMEO 3898.

SINGLE PARENT 29, DAUGHTER 3, have full time employment would like to meet lady 20-30 years. No objection to children must be honest and sincere. Please write G. Hilleary, C/- PO RUBYVALE 4702.

GRASSIFIEDS

SINGLE FEMALE (23) dark hair, blue eyes, attractive, tall, (5' 10") medium build, good sense of humour. Loves outdoors, art, music, natural food. Seeking friendship with male under 35 years with similar interests. Send letter to Michele C/- CAMBERWELL PO 3124.

MECHANIC 31 Y.O. don't drink, smoke or take illicit drugs. I do enjoy fishing camping hunting, good cooking, fast cars. Wish to experience starting family with loving woman 25-35 y.o. Please write with photo to Christopher, 137 Alagalah St, NARROMINE 2830. All replies answered.

SIX FOOT TALL AND SLIM, 49 year old woodturner would like to meet slim non smoking lady with craft interests to share country style home with wonderful sea view in Batemans Bay area. A garden full of palms and 44 acres of bushland. Ivan, 220 Tomakin Rd, TOMAKIN 2537.

SINGLE MALE 38, 180 cm Virgo/Sagittarius. An eccentric individualist with a gentle contemplative nature, I don't drink, smoke or use drugs but I do eat meat in moderation. Although living in isolation I'm not a recluse but have many interests and enjoy the company of like minded people. My musical tastes lean toward the baroque era. I am seeking my soulmate; ideally a gentle, honest, caring, intelligent, non-manipulative lady in her 30's not a religious fundamentalist of any creed nor a smoker. I am looking to the inner beauty that transcends ideas of physical form. If this letter strikes a chord within you please write to Andrew Hardwick, C/- PO URALLA 2358.

SINGLE MALE (37) NON SMOKER, caring alternative thinker looking for friendship with lady. Interests include reading, conversation, sharing, motorcycle touring, music (Joni Mitchell), quiet places. David, 3 Park St, SINGLETON 2330.

CANCERIAN MALE 26 low income, non smoker wants to meet simple living lady with natural spark. For quiet meaningful relationship. Keith, 3 David St, KADINA 5554.

SINGLE (F) 54 YEARS ENERGETIC loves travelling Australia. Old time dancing seeks male companion similar interests. Lasting friendship Aussie/Pommie, preferred to 60. Doreen Shailer, 2 Shepparton Rd, HELENSVALE 4210.

THIRTY YEAR OLD MALE masseur wishes to meet laid-back woman who believes in the mystical. Write Tony Brown, 151 Young St, ANNANDALE 2038.

LATE GRASSIFIEDS

MAINDAMPLE STEINER SCHOOL is a small rural school situated near Mansfield NE Victoria. It began in 1984 with parents and teachers buying land and building mudbrick classrooms. The school offers successful combinations of intellectual, artistic and practical activities — with an emphasis on craft, music, biodynamics gardening and seasonal lifestyle celebrated through the festivals. Small classes and individual tuition — low fee structure — government funded. Enrolments for 1988 — vacancies in kinda, prep and classes 1-5. Enquiries: School 057-787-493 BH. Marg Wilson 057-789-515 AH.

AUSTRALASIAN HEALTH AND HEALING — Journal of alternative medicine, Australia's major health call quarterly, emphasising self healing and prevention of illness through measures which raise body defenses. Sold at most newsagents and health shops \$3.50 each and by subscription \$12.50 per four issues (1 year) \$23.00 eight issues (2 years). Write Australasian Health and Healing, 29 Terrace St, KINGSCLIFF 2487.

DARLING DOWNS CHINCHILLA. Secluded 138 acres. Kangaroos, koalas other native fauna. Selectively cleared, 3 dams, sheds, dwelling with solar power. Established organic orchard and veggie garden. Chook pen, goat pens and paddock. Developed for self sufficiency life style. Priced for quick sale with petrol-kero tractor included \$36,500 neg. Also for sale: adjoining 128 acres, partly cleared, fenced, 2 dams. Small caravan. Quiet peaceful area. \$26,000 neg. Reduced prices if both blocks sold together. Ph: 074-653-539.

TEA ROOMS AND COUNTRY HOME. For sale: Three B/R home all mod cons, in addition separate cottage, has been successful Tea Room business. On 25 acres of pleasant woodland. Sealed road, school and main bus lines to front door. Panoramic views, close to Warrumbungle National Park NSW. Has to be seen to be appreciated. \$40,000 ONO. Ph: 068-821-755 BH. Paul Mines.

I AM A SINGLE PARENT with three lovely children. I, myself am artistic, nice to look, well spoken and very English with a good standard of education. I came on a visit to Australia seven years ago and loved the open space and environment and the people. I wish to correspond with a male, forty or so with a view to being sponsored to being my little family and myself to settle on a small farm in Australia where we can endeavour to be self sufficient. I have applied to emigrate to Australia and have passed all the required qualifications. I am fully able to pay all our travelling expenses but to my dismay I am told I lack ten points in the 'points system', that is current for Australian permanent residency. We are not, English people. I understand, on the desirable list of immigrants. I speak for myself and my family when I affirm that I consider ourselves very desirable immigrants for Australia — non drinkers, not into drugs or seriously into religion altogether nice hard working supplicants. Please can anybody help us in this. Jennifer Wood, 51 The Glade, Staines, Middlesex, ENGLAND.

ORGANIC GROWING a quarterly magazine about growing food the natural way. Gives you practical ideas for organic gardening, farming, livestock and related subjects. Available at newsagents (\$2) or by annual subscription (\$10 Australia or \$12 overseas). PO Box 228, ULVERSTONE 7315.

AUSTRALASIAN SURVIVOR the magazine that prepares its readers for the fast coming hard times. \$2 for sample. PO Box 11, DICKSON 2602.

FOR SALE GAS FRIDGE and two gas bottles 100 lb LPG. Ph: 055-931-725.

457 ACRES near Inverell. Bush block, new boundary three sides. Power, phone close by. Large water hole, good red soil, some granite. No other improvements. \$50,000. Further enquiries 067-2304 ask for 63 after 7 p.m.

GRASSIFIEDS

Please note the rate increase for the 'grassifieds'. General advertisements will now cost 30¢ per word, and property for sale will be 40¢ per word. Write your advertisement briefly and clearly — abbreviate where possible — and send with the necessary payment to 'Grassifieds', Box 764, Shepparton 3630, to arrive by the deadline for the issue in which you wish your advertisement to appear.

Sender's NameFor issue No/s.....

.....Classification,.....

..... Postcode Cost

Please complete the above (not for publication) — it helps us with our record-keeping so we can give you better service.

[illegible]

Information Available

WOOD WISE

This booklet produced by the Appropriate Technology Development Group of WA gives practical advice on using wood for heating your home. It covers safety precautions, best use of your wood burner, selection and storage of firewood. For your copy, send \$2.50 to: ATDG Inc, Winter House, Johanna St, NORTH FREMANTLE 6159.

SYDNEY'S NATURAL HEALTH DIRECTORY

The function of this directory is to connect the general public with all natural health services available in Sydney and NSW. *Sydney's Natural Health Directory* is available in most health food stores, some newsagencies, major natural health centres, as well as other distribution points. If you would like a copy, please send an A5 envelope (6 in x 9 in) self addressed, with a 50 cent stamp to: NAROPA Design and Publications, PO Box 474, PADDINGTON 2021.

THE BAMBOO NETWORK

By means of a bi-annual newsletter the network aims to put Australian bamboo enthusiasts in touch with one another and other bamboo organisations world wide; to share plant material within the network and with botanic gardens; to consolidate what bamboos are in Australia and import other desirable species; to promote, share and diversify uses of bamboo in the human and natural environments. Membership costs \$6.50, enquiries to: **THE BAMBOO NETWORK**, Glen Esk Rd, ROLLANDS PLAINS 2441. PH 065-858-283.

CENTREPOINT MAGAZINE

A revealing magazine about the intimate lives and experiences of people living in the Centrepoint Community north of Auckland at Albany. A magazine about people exploring themselves, exploring their world and reaching out to their potential. Each issue focusses on an important theme in life transcribed from the challenging, insightful talks of Bert Potter, Spiritual Leader of Centrepoint. Annual subscription \$10 NZ. (Overseas \$14). Send to: Publications Centrepoint, Box 35 ALBANY, AK10, NZ.

SOLAR 87 — CREATING THE FUTURE

This conference, to be held at Australian National University, Canberra on November 26-28 1987, will examine the ways in which renewable energy technologies will be applied to society's future needs and explore the current development of these technologies. It has been organised by the Australian and NZ Solar Energy Society, and further information can be obtained from: John Ballinger, School of Architecture, University of NSW, PO Box 1, KENSINGTON 2033.

BIO PRODUCTS AUSTRALIA PTY LTD

Bio Products Australia is a young company selling natural paints and varnishes, that means, paints without chemicals, insecticides and pesticides. With increasing evidence that chemical based paints and varnishes are dangerous for human health, there is a demand for non-toxic alternatives. These products help to maintain the health and balance of nature, while providing protection and care for the house, yard, garden and human beings. For further information please write to: **BIO Products Aust. P/L, 25 Aldgate Tce, BRIDGEWATER 5155.**

SOCIAL CHARACTERISTICS OF ALTERNATIVE LIFESTYLE PARTICIPANTS IN AUSTRALIA.

The second edition of this book by Dr. Bill Metcalf and Mr. Frank Vancly is now available. It sells for \$10 and is obtainable from the publisher: **The Institute of Applied Environmental Research, Griffith University, NATHAN 4111.**

GOAT HEALTH AND PRODUCTION

This new quarterly bulletin supplies the industry with essential, up-to-date, practical information from diagnostic laboratories, research groups, veterinarians, farm consultants and farmers on how to get the best out of your goats. For NZ \$22.00 New Zealand or NZ \$35.00 overseas you get an informative bulletin covering recognising and preventing diseases of goats and managing for increased production. Send to **MAFCorp Primedia, Ministry of Agriculture and Fisheries, Private Bag, WELLINGTON, NZ.**

Information Available

NASAA

The National Association for Sustainable Agriculture, Australia has recently come into existence. The aim of NASAA is to promote and facilitate the use of a sustainable farm management system by farmers. Its main activities at present include the establishment and maintenance of standards for sustainable agriculture. Enforceable standards are necessary as product characteristics cannot be readily identified at the point of sale.

The development of a centre where information about this system is gathered and sent is a priority for which funding is sought at present.

For more information please write to: **The Secretary, National Association For Sustainable Agriculture, Box A366, Sydney South PO, SYDNEY 2000.**

CARING FOR DONKEYS

This book is an introduction to donkey care compiled by the Australian Donkey Breed Society, S.A. branch, with the kind assistance of Dr. B. Wilson, Veterinary Advisor, Department of Agriculture.

A very comprehensive and helpful book on the basic donkey requirements including: choosing your first donkey, nutrition, hoof care, gelding, general health care, basic training and then finally breeding and the care of foals. It is an excellent book for people to read and study prior to obtaining a donkey, and is available at \$8.00 plus postage from: **The Secretary, Sandra Nicholls, 72 Penney's Hill Rd, HACKHAM 5163. Ph: 382-9381.**

HERBAL INSECT REMEDIES

For people seeking natural solutions to their insect problem, a range of products is now available under the name Green Ban. These preparations are not synthetic and contain no animal products or petrochemicals. The range includes flea powder, insect repellent and insecticide/plant food, all based on herbal ingredients. If you can't find them in your local health food store, write to: **Mulgum Hollow Farm, PO Box 47, LISMORE 2480.**

NEW AGE BOOKS

Do you have difficulty getting metaphysical books in your area? Send for our comprehensive mail order catalogue. Wellness, Prosperity, Astrology, Tarot, Relaxation and Subliminal Tapes, Childcare, Sexuality, Alternative Therapies, Teaching Resources. Enquiries: **Patricia Hooper, Spiral, 269 Smith Street, FITZROY 3065.**

HANDMINE UPDATE

Since this device was described in GR 56 some readers have complained that they can't find it in health food shops or pharmacies. If you can't find a local supplier for the handmine, claimed to help victims of stroke and RSI as well as relieve stress and muscle strain, then contact one of these people for information on where it's obtainable in your area: **Medley Clarke, Natural Force Company, ROZELLE 2039, Ph: 02-212-3887, Cole Buchanan, Lincoln House Publicity, PO Box 17, BALMAIN 2041.**

THE AUSTRALIAN CRAFT SHOW

The second annual show and sale of Australian Crafts will be held on November 18-22 1987 at the Royal Hall of Industries, Royal Agricultural Showgrounds, Sydney. Applicants must be the creator and producer of the craft sold and only art or craft made in Australia will be considered. For further information write to: **PO Box 453, LANE COVE 2066.**

CANCER HELP CENTRE

Please note that the Cancer Information and Support Society have changed their address to 1/65 Bay Rd. **WAVERTON 2060.**

ORGANIC FARMERS UNITE!

We would like to hear from anyone interested in forming an Australian Association of Organic Growers with a view to increasing public awareness of the benefits of organically grown produce. Also to provide an exchange of information and a discount on seeds or machinery. Please send a SAE to: **Geoff and Carolyn Richardson, 222 Wattamolla Rd, BERRY 2535.**

SOLAR PRODUCT DEVELOPMENT

The Victorian Solar Energy Council aims to encourage the commercial development of new and existing solar products so that eventually there will be less dependence on fossil fuels and more on renewable energy sources like the sun. The Council suggests that there is scope for development and marketing of new solar products in many areas: agriculture, communication, transport, lighting and domestic uses are just a few. Finance is available for all stages of production if the idea is considered feasible. If you have an idea or prototype for a new product, or would like more information on the activities of the Council, contact: **Victorian Solar Energy Council, 10th Floor 270 Flinders St, MELBOURNE 3000.**

NON-VIOLENCE: A WAY OF LIFE

The Community of the Ark (Gandhian movement in France) is organising a session in English, for those interested to find out more about non-violence and community life. It will take place at 'la Fleyssiere' (80 km north-west of Montpellier in the south of France), from September 2nd 1987 (arrival) to September 11th 1987 (departure). This is one of several of the Ark communities; the first one was founded in 1948, by Lanza del Vasto, a disciple of Gandhi. During the session, the whole morning will be devoted to manual work, while the afternoon and evening will be shared between talks, yoga exercises singing, dancing and workshops. It will end with a farewell celebration for which participants will be encouraged to share their talents. If you are interested, please write to: **Michelle Gyte, la Fleyssiere, 34260- Le Bousquet D'Orb, FRANCE (ph: 67.23.72.00).**

A PRACTICAL GUIDE TO HANDLING AND TRAINING A DONKEY by Wendy Mayer

Wendy Mayer has written this book to help the novice and the more experienced donkey owners obtain the best results when handling this delightful animal and along the way form a wonderful friendship with their long eared companion. The book is set out in a logical sequence from handling the uneducated donkey through to riding out away from the home paddock. There are many helpful photos and drawings which highlight the information set out in each chapter.

This book is available from the author for \$9.98 (postpaid). **Wendy Mayer, PO Box 559, MOUNT BARKER 5251.**

A WALK IN THE BUSH

This is a children's book based on a series of 22 oil paintings that join together to create a panorama of the forest floor. The perspective is that of a child who follows a caterpillar through the bush from sunrise to sunset. Noella Marie is the author and illustrator of this delightful book and copies are available at \$12.95 plus postage from the publishers. **Bello Books Pty.Ltd. Publishers, 55 Grove St, BALMAIN 2041.**

ENLIGHTENED ANARCHISM

Many thoughtful and intelligent people all over the world are beginning to see the false way of the present life and therefore are adopting a simple life-style. Most people do not seem to realise that there is much virtue and wisdom in being simple. Swami Nirvalananda has been studying these ideas for many years and has written a tiny booklet for you to meditate upon. It is available just for the asking from: **Viswa Shanti Nikethana, B.R. Hills PO, Chamaraanagar 571 313, KARNATAKA INDIA.**

PESTICIDE EFFECTS ON BEES

The NSW Department of Agriculture has produced a booklet entitled *Pesticides Affecting Beekeeping and Crop Pollination* (Agdex 481/687), which describes in clear, matter-of-fact language what pesticides are harmful to bees, how bees are affected and what measures can be taken to minimise the damage. It includes a comprehensive list showing the toxicity of common agricultural pesticides and is intended for the information of farmers, beekeepers and professional pesticide applicators. If you wish to obtain a copy of the booklet, contact your local office of the Department of Agriculture for details of price and where to send your order.

Feedback Link-Up Feedback

Aloha Amigo,

I am an American male living alone on 750 acres of bush in northern NSW, frost free, plenty of rain, one large dam, poor to average soil. No animals or garden as yet. I have spent the last year building a three storey home to correct PYRAMID proportions. This is in the hope of having a building which is not only a comfortable home but also a building capable of storing large quantities of foodstuffs without spoiling. And also having the pyramid as a booster for the solar charged battery system. (I have succeeded in recharging regular D cell flashlight batteries with a small model pyramid. With a successively greater charge continuing up to 14 days before the batteries burnt out.)

Anyway, self sufficiency is the goal for the energy needs of the home. And with some more research and experimentation and luck maybe a breakthrough on a practical, effective electrical generating system or battery booster based on tapping pyramid power. My energy level and enthusiasm towards this project has hit a lull and someone with an inquisitive nature and/or an interest in electronics would be appreciated. The pyramid generates a field of 13,000 gauss which correlates to the field around the hands of a practising healer. So there is more research in this and many other areas. This letter is an invitation to anyone with an interest to explore the possibilities involved either by coming here or corresponding or even by telephone. Some help with the setting up of a small garden, especially herbs would be most useful as well.

**Sully
TABULAM 2470.**

Hi folks,

Enjoy your great magazine, have found the wealth of information very handy in numerous things. Could anyone help me as to the best way to dry mushrooms and pickle eggs? I am also interested in herbs and their usages. I am a single aquarian mother (23 with 2½ year old son) living in a large country town. If there are any GR families who live in the area maybe we can get together sometime as I am rather lonely and would also enjoy some company for my son.

**Anita Lander
Flat 2/43 Ella St
MARYBOROUGH 4650.**

Hello Grassroot Readers,

Greetings from the Wild West. I live on a 16 acre, bush block, on my own with my dog, cat and plenty of nature spirits. I too am creating my heaven on earth and it's been a blessing to have the opportunity to experience peace, contentment and all the hard work that is involved with building, growing vegies and developing one-self spiritually on the land. The hard work is something you can't perceive until you work through it, but the experience and what you gain out of it, is well worth the hard slog.

My main reason for writing to GR is that I have created a small time COUNTRY NEWSPAPER called 'The Communicator' it's been going now 8 months. It's been a struggle although I find it satisfying to enlighten the readers with articles that are alternative ways to what they are used to. They enjoy receiving it in their mailboxes every month. I have a variety of sections which include, oral history of the area, gardening hints, poetry, classifieds, health and body care, agriculture, recipes, jokes and children section. I do the printing on an old gestetner, so as you can imagine, it's a lot of energy involved. I now have support and help, which is great for me and the paper. My main aim is to help break down the communication barriers in the district, so people can be informed on what's on and to learn the alternative ways and share their wisdom.

So why I am appealing to GR readers is that if there is anybody wishing to contribute an article that I can print in those sections, I would greatly appreciate it.

**Sharon Pearson
Lot 3 Piggot Martin Rd
YOUNGS SIDING 6330.**

Dear GR,

I really enjoy your magazine. I get a lot of information from it. I thought maybe a reader could help me with an organic gardening problem. I have a vegie garden that I use a lot of compost and manure in. I have heard about SEAWEED that is washed up on shore, but I don't know how to treat it. What do I do with the seaweed after I have collected it from the seashore?

**Shirley Hogan
33 Laronya Cres
CAPALABA 4157.**

Dear Meg and Readers of Grass Roots,

Over the years I have thoroughly enjoyed your magazine, all of the features, stories and the helpful hints, which certainly do come in handy. But best of all, I enjoy the Feedback Link-Up section, it sure is a great way of meeting and making new friends, as well as exchanging new and different ideas.

I am hoping that somebody may have ideas on solving a foot problem that I have with my horse. I have tried vets, farriers and had many opinions, but nothing has solved it. I was wondering if there could be a natural method that could help him. My horse Chief, is a seven year old Palomino gelding. He has white feet, which are extremely brittle. A normal shoe lasts a horse six weeks, with Chief I am lucky if it lasts two weeks. The sole of his foot is very soft, and the wall just breaks away. Sometimes the farrier is lucky if he can put up to three nails into one hoof, as there is virtually no wall to nail to. He does get ridden a lot, there are a lot of dirt roads, as well as soft ground to ride on and we have cold winters and warm to hot summers, so I don't think that the weather could play a part. At the moment he is being spelled in a grassy paddock, and being fed a biscuit of lucerne a day. Over the years I have fed him various horse feeds, as well as oats and other grain to keep him going during winter, I have also tried Biocore in his feed as well as hoof strengthener paints, but really, I'm not getting anywhere.

Any ideas would be appreciated and all letters received will be answered.



**Julianne Campbell
Unit 2
37 Warrien Road
CROYDON 3136.**

Dear Readers,

We are really at the grass roots level of planning for our future. We wish to buy land and build or renovate a house to live on and off in early 88'. We would welcome your experienced advice on optimum quantities of land per cow and people. We are a family of four; two toddlers; but wish to have enough garden/orchard for self sufficiency. HOW MUCH LAND is the minimum and on the other end of the scale, how much land would be the maximum our family could do justice. Can any of you recommend areas where the land is really worth real estate prices? We wish to move south, even as far as Tasmania so as you can see, our options are wide open. Hope you can help us with your experiences.

**Alan and Ann Menager
101 Illuta Ave
FERNY HILLS 4055.**

Dear Grassroots,

I am thinking of going to TASMANIA to live — hopefully to teach and/or study art. I am a weaver/fibre artist seeking a place to live, work and weave. First of all, I'd like to know a bit about Tasmania. All I've heard is it's cold and wet — can someone fill me in on this — how cold — does anyone go swimming in Tasmania? What sort of temperatures do you get? I should like to rent a farmhouse somewhere — are they about and in liveable condition (the older the better) and at what sort of rents? I'm not sure where to go really, as yet, so I'll probably travel around a bit first. I'd love to hear from other weavers and artists, hopefully to gain an understanding of what's happening art/craft wise and to meet one day. I once heard of a weaving co-op in the Jackeys Marsh area — does anyone know anything of it? Thanks a lot! I hope to be heading down around August/September, 1987.

**Dianne Kerr
C/- Coraki Post Office
CORAKI 2471.**

Hello mates!

Anyone remember THE GOOD OLD DAYS B.T. (before tourism) when mum, dad and the kids could go to any beach and camp . . . with cold water showers and all free, save for a tiny charge for the caretaker? When one could drive a short way from the city and be in rural surroundings? When food tasted like food and not a conglomeration of chemicals and 'vitamins'. When sausages were made of meat and not plastic, fat, and more chemicals. When bacon had a lovely smell from genuine smoking. When meat pies really were. When all shoes were made from leather, easy on the feet, not unyielding plastic. When lakes and rivers were free of pollutants and also roaring speedboats dragging lunatics on skis frightening all the fish away? Ah, PROGRESS, what crimes are committed in thy name!

**Marion Fantleroy
32 Dalgety St
WOLLGOOLGA 2450.**

Feedback Link-Up Feedback

Dear Grass Roots People,

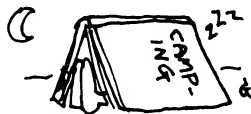
I love this magazine heaps. Whenever a new issue comes out, it inspires me and gives me a boost of excitement and belief that I can do it too.

My dream is similar to many of yours, some acres with a home, animals, herbs, vegetables, time to develop crafty skills, to escape the noise of your neighbour's telephone, the cars in the street, and the doldrum of the 9-5 office routine.

I am trying to sell my house in the suburbs at the moment so that I can do something about my dream. Is there much around where it's, WARM, MAYBE COASTAL, for about \$20,000? Also I have 2 big dogs, who are my family. Has anybody had experiences with trying to TURN CITY DOGS INTO COUNTRY DOGS? I'm worried about them with chickens, sheep, and so on.

I am 25 and have always lived in the city, but I know deep down that the country is the right way and I long for it. I will have masses to learn about it all, but I can't wait.

I'd love to hear from anyone with ideas, thoughts, advice, or encouragement. Thanks everyone.



Penny Cole
25 Kinsella St
HIGGINS 2615.

Hi everyone,

Thought I would write and say what a great magazine. I was wondering could someone help me with a FELTED CHILD'S SLIPPER PATTERN. Also would anyone like to correspond with me I'm 29, with 3 children 11, 8, 6, love handcrafts and very interested in GR lifestyle but stuck in suburbia. Love to hear from you.

Lynne Sheldon-Sayer
79A Russell St
NELSON NZ.

Dear Grass Roots Magazine,

My problem is I can't meet anyone I agree with. I realise EVERYONE HAS THEIR DIFFERENCES but they all share one basic belief which I do not. That is motorised transport. They all insist on allowing their body to be transported on wheels without the slightest question that this might be wrong. I have not been motorised since January 1983. Maybe a person such as myself exists and reads your magazine. Other views I do not share with most people are, owning land, the dole (I sharpen knives for money, irregular, indirect), banking, sending children to school, doctors, the list goes on and on. Surely I could not be the only person who thinks this way but so far I have not met anyone who agrees (by doing) with the first point. I am 35, tanned, healthy and loving.

Mark Cope
C/- Post Office
TOWNSVILLE 4810.

Dear GR,

Three women (including myself) have recently proved the medical profession wrong. We all have DOUBLE UTERUSES, so we're supposed to be sterile, find it difficult to conceive or have difficult births. I had my first baby without knowing I had a double uterus. My friend was told she would be likely to need a caesarean because she had a double uterus. She subsequently had a natural birth. My second birth was induced but it was because the baby was overdue, not due to the double uterus. I have since met another lady who has had two natural and one induced birth, only knowing with the last baby that she had the double uterus. All our births were without any complications. We have six children between us and each of us have been pregnant three times, so conceiving is not a problem! So if there are any ladies with this 'problem' ask your doctor to at least give you a chance at a natural birth. I am not opposed to the doctors, but I am saying that sometimes they may be wrong in their beliefs due to ignorance or lack of experience in a certain rare 'abnormality' such as the double uteruses.

If anyone has little gardening sense like me a good straightforward book I have is *The Learner Gardeners Guide* by Toni Mackenzie (Fontana). It deals with 'easy' plants, natives, vegies, herbs, fruit, compost, pests, companion planting, buying, fire resistant varieties, plants for the city; all concise and easy to understand. Cost \$8.95 — I got mine at the newsagent. Best of health.

Cathy Lonsdale
RMB 8
Missabotti Rd
BOWRAVILLE 2449.

Dear GR Readers,

It's great to read letters from those who have made the change in lifestyle, those who hope to and those who simply dream about it. I belong to the latter group at the moment but . . . ?

I would like to hear about MUSHROOM GROWING in either NSW or QLD areas. Advice on strains, disease, best housing and marketing ideas would be appreciated. Also if anyone has experienced pitfalls, could they let me know. I would like it to be a money making venture eventually.

My husband and I are in our late 40's and as yet unable to make the move. Any people who have made the change in lifestyle, in our age group, are welcome to write to us of their experience.

A and B Guy
173 Butler St
ARMIDALE 2350.

Dear GR,

I read in *Grass Roots* — *The Early Years* a letter from Jim about his extended family and his alternate LIFESTYLE IN AN URBAN SETTING.

I felt a great warmth for Jim and his family and what they were doing. Many years ago I lived in a house with some young people. Restless, impatient, to their own minds, 'poor' that is, not as rich as they would dream of being, they were frustrated at being caught up in studies, at not having enough money to buy themselves out of distractions or boredom. And a popular catchphrase was 'Byron, Byron Bay, everything will be all right when we get to Byron'. Those people could travel to a thousand Byron Bays and still not find peace in their hearts. I think that if you can't find some peace, joy and happiness in your own heart then you are better off right where you are and the sooner one starts some serious inner restructuring the better. So many people seem to hold a fear or apprehension towards life. They seem to see life as a contest, something separate from themselves. A journey involving confusions, dangers, and a deep forest, sinister, evil, to be travelled. So much energy goes into maintaining this fear, for what! Nobody gets out of life alive, it's better to resolve to be enthusiastic, positive and happy. Jim's got the right idea, I'm with him; he might not have 100 acres in the country so he made the country in his backyard. Life to me is like a river, one thing, a oneness, encompassing all, the known, the unknown, the living and inanimate, that sometimes cascades over a few, scattering into a million droplets.

Tony Lou
5 Ballast Pt. Rd
BIRCHGROVE 2041.

Dear Meg,

This is our first letter to you at GR. My wife and I have been reading your magazine for many years and we enjoy reading all the articles and find many of the ideas most useful on our little hobby farm. We live in a beautiful spot, deep in the north west of Tasmania, a little piece of paradise. We try to be self sufficient, as we have a beautiful garden and an 80 year old house, we have mains power and a central heating combustion stove. Over the years we have gained knowledge about organic gardening, keeping bees, goats, rabbits, poultry, building and fencing, so thank you again GR and all you beloved GR people.

Ilona, Jana and Harry Behrendt
RSD 558
RODGER-RIVER 7330.

Dear Grass Roots Friends,

Could anyone advise as to if I will be able to strike a cutting of the SCEROLA CHERRY. I have one bush, but nowhere near enough of this valuable fruit, which is high in vitamin C. Enjoy *Grass Roots*, and look forward to hearing from someone.

Audrey Coman
MS 827
MOORE PARK 4670.

Dear GR Readers,

As I now realise how extensive the readership of your magazine is, I am hoping that a reader can re-attach me with some PEOPLE. They are Barry and Deborah Myers and family who lived at Portal St, Darra in Queensland in 1984. Barry is a house painter and the most recent news is that he went to south-west Queensland or northern New South Wales, looking for work, but of course by this time he could be anywhere in Australia. Hoping that someone can put me in contact with them.

Gerard Kelly
12 Yeerinbool Court
ARANA HILLS 4054.

Feedback Link-Up Feedback

Dear GR Readers,

I am writing a BOOK on the HISTORY OF HAND SPINNING, weaving and natural dyeing and I am turning to you the readers of *Grass Roots* as I am having difficulties finding any information on the subject.

If you have any information that would be helpful then please drop me a line and let me know. Perhaps you can remember sitting at your grandmother's feet as she went about her spinning, maybe you know when the three crafts were introduced to Aussie. Whatever it is please let me know as all help would be appreciated.

I am a hand spinner and natural dyer and am tired of reading books on English and American spinning so here is our chance Australia.

**Jenny Brandis
26 Forrest St
QUAIRADING 6383.**

Dear Grass Roots People,

Have been reading your mag on and off now since its early days and enjoy it immensely. While saving madly for a place in the bush we have to be content growing all sorts of vegies and plants in our little suburban house. I plan to build a pergola across the back of the house and grow a grapevine across it so we have shade in summer and sun in winter. Not an original idea but most people grow ornamental grapes which does not interest me at all. I would like to GROW a good SWEET EATING GRAPE preferably a white type. Can anyone advise me what would be a suitable type of vine and where I could buy seeds or cuttings.

I am looking forward to trying out the root cellaring shown in my current GR. I have a batch of cabbages coming up and I am the only one in the house who eats them in any quantity.

**Mike Moriarty
54 Gasmata Cres
WHALAN 2770.**

Dear Readers,

The ECOPONICS SYSTEM I have developed requires half a hectare of land where water is plentiful. On this land is constructed a special greenhouse containing the Fishponic system which is a means of culturing fish for food, but also uses the fishes' ability to exhale ammonium nitrate. Ammonium nitrite is toxic to plants and fish. So a special filter uses bacteria to convert this to ammonium nitrate which is not toxic. This is a rich cheap source of nitrogen which is used to feed plants in the greenhouse and also in outside organic garden beds.

In winter the greenhouse collects heat from sunlight, which is ducted into rock storage heat banks. At night this stored heat keeps the temperature in the greenhouse at an acceptable level to ensure plants thrive all winter. In summer the greenhouse uses solar heat to vent the unwanted hot air. Low watt circulating fans, pumps and lighting are provided from solar electric panels and windmill alternators.

Inside the greenhouse plants grow in ring culture beds and gravel hydroponic beds. However, this is hydroponics with a difference because the plants grow on nutrients extracted from compost. Species of earthworms that thrive on compost are bred to feed the fish, and to sell. The decomposed compost, including the rich worm castings, are stored in special drums. Nitrogen-rich water drawn from the fish tank filter extraction point is periodically circulated through the drum leaching out the nutrients, which are then fed directly into the ring culture and gravel plant beds where the vegetables and other plants thrive. Eventually the spent compost is removed and used as mulch around fruit trees and outside vegetable beds.

A complete Ecoponic system integrates the outdoor areas with the living and greenhouse area. It is the base for providing all the vegetable, fruit, meat, milk and egg requirements for a family or group of families on a year round basis. It also provides all electrical and heating requirements.

My vision is to see a group of people join with me to establish a five hectare Ecoponic system as an ALTERNATIVE RESEARCH AND WORK DEVELOPMENT CENTRE. I wish to provide a way for people that do not have the financial means, such as myself, to get out of the imposed society. The centre will produce a variety of readily saleable items such as vegetables, fruits, plants, fish fingerlings for stocking ponds, and tanks, tourism, fibreglass fishponic kits, and ecoponic greenhouse kits.

The hardest part is finding someone out there who would be interested and willing to finance such a venture. I have the practical experience and detailed data to quickly put a centre into operation. If anyone is interested in helping, please write.

**John C Duffey
5 McKee Drive
BEGA 2550.**

Dear Readers,

We are gradually working towards a more relaxed and healthy lifestyle, and are slowly developing four acres but not living there as yet. We have a little Howard 2000 tractor with rotavator attachment, and now need to find a MOWER OR SLASHER ATTACHMENT for it. We have advertised several times and contacted likely sources, but so far nothing. Does anyone know where we can get this, or alternatively, whether we could build something suitable ourselves?

My second plea for help relates to starting a SMALL HOME ORCHARD trained on a post and wire system (Bouche Thomas) with fruit trees planted at an angle and kept small. We have read books and articles on fruit tree growing but would love to hear from anyone with first hand experience. The ground is ready, posts purchased, we shall plant this winter.

Good luck to you all.

**Pat and Ted Tratt
22 Symons Rd
AVONSLEIGH 3782.**

Dear Grass Roots Readers,

Is there anybody who may have a recipe for a SUGAR FREE custard with no artificial sweetener and any other sugar free sweet munchie recipe would be appreciated.

**Pam Mills
C/- PO Box 295
CASTLEMAINE.**

Dear Readers,

Many of you will be very happy to know that the EMERALD CIRCLE has joined with THE BROTHERHOOD OF ST BARTHOLOMEWS. While the Emerald Circle will still continue its programme of spiritual healing, St. Bartholemews will offer healing, guidance and love on a residential basis. St. Barts. Principal, Mrs. Molly Rhodes, is a Doctor of Metaphysics (USA). She will give a warm welcome to any sincere people who are prepared to study her methods and to give a hand on her 80 acre property. There will be no charge, however it will be necessary to subscribe toward the food and living costs.

Any genuine folk interested in the St. Bartholemew system can obtain an application form by writing to: Molly Rhodes, St. Bartholemews, Lot 188 Hannanvale Road, Lorne 2439.

The new postal address for The Emerald Circle is: Hon. Sec., PO Box 800, Noosa Heads 4567.

St. Bartholemews is progressing rapidly toward being a self sustaining community. The Emerald Circle's smaller lush coastal property will shortly be available to a suitable buyer as we move our operation to Lorne. God bless all you readers.

**The Emerald Circle and
The Brotherhood of St. Bartholemews.**

Dear Readers,

Having spent the last few weeks browsing through back issues of this fine magazine, my own REFLECTIONS are: To those people still in the smoke and wondering when they'll ever have the opportunity to live in a pollution free environment. Unless you're extremely lucky or highly skilled the only way I know is to work hard at whatever you're doing and take a second job preferably one that pays cash, e.g. driving cabs, because if you keep your goal in mind you'll get there and leave behind the maddening pace of our cities. You can also start your own business, even here though you need money to start and the burn out rate is very high. I ran a small company for ten years as this was the only way I could see of making enough money to get away from the smoke.

Since leaving school I've spent most of my life travelling around the world, visiting all the major continents and cities, to satisfy my curiosity on whom I share our fine world with and to the best of my ability conversing with people of different cultures and backgrounds. I'm living on the NSW south coast now, and contemplating my next move, in this very relaxing environment my marathon training runs have dwindled to bush/beach strolls, I'm trying to do some writing, and with the modem on my computer follow the stock market. I'm wondering about my Yin Yang balance, and feel I should make an effort to cultivate some sort of female friendship. The only belief I have at the moment is to lead a healthy lifestyle, and have plenty of time to answer any letters sent in by women exchanging views.

**David R Cockcroft
11 Surf St
LAKE TABOURIE 2539.**

Feedback Link-Up Feedback

Dear Dog Lovers,

I would like to know if anyone has any good RECIPES for DOG FOODS full of vitamins and minerals. I feel that dogs should have a varied diet that will keep them healthy and happy. I am fourteen years old and have studied many (to my standards) books on dogs. If anyone has any unpublished tips to share, it will be most appreciated.

Robert Finch
PO Box 251
MYRTLEFORD 3737.

Dear Grass Roots,

Firstly to PETER of MANILDRA (GR 59, p. 92) — yes the criticism is quite justified; I acknowledge my fault and my sin (of omission)! All I can say in my own defence is to hark back to GR 43 where I did deal with the various mispresentations and strongly urged the use of the vet and to go in yourself only after making sure the calf is properly presented. I also mentioned the free literature available from the Department of Agriculture. However, what really hurt was the accusation of ignorance considering I had about 16 years practical experience with cattle with 12 of them being the running of a family owned Murray Grey stud which had some success in the local show circuit including best trio-(cow, calf and sire) against all breeds at the Glen Innes Beef show about 10 years ago.

BASIC FIRST AID in GR 59 says a lot in its first paragraph. I urge all readers to do the courses available through either St John Ambulance Association or Australian Red Cross. It is fun and should boost your confidence should you be faced with a life threatening crisis.

Andrew Hardwick
'Studley Royal'
Devoncourt Rd
URALLA 2358.

Dear Readers,

We have a BORE depth 30.65 metres with water at 24.10 metres giving 51.5 gallons an hour. We don't wish to have the power on but would prefer, if possible to GO SOLAR. There seems to be a difficulty using solar power with this small amount per hour. This water would be adequate for our needs on five acres and save carting water in dry spells. If anyone can help we would be pleased to hear from you.

E Angus
6 McGregor Tce
STANTHORPE 4380.

Dear Editors,

I am currently doing research in the DIET OF EARLY SETTLERS in Australia, specifically my interest is those non-alcoholic drinks, that were made on a herb spice base. I would be most grateful to anyone who has information on these.

Blair Montague-Drake
'Burrawang Farm'
Batar Creek Road
KENDALL 2439.



Dear Grass Roots Readers,

I would like to MEET some FRIENDLY NATURE PEOPLE, living around Melbourne, who, even if they don't own a farm, or a piece of bushland, are nature and animal loving and GR at heart. I believe there must be a lot of people in my age group (50/60) who do not think of themselves as being old, and who would wish to get in touch with compatible GR friends, to share their ideas, organise meetings and outings. They should be preferably cheerful and sensible, taking pleasure in simple things in life. Interested in healthy living, yoga, relaxation, travelling, camping, gardening, cooking, home brew making, possible vegetarian, and non smoker. Also open to discussion, and exchange of views, reading, classical music but not pretentious. For myself, I try to do all the things I request above, but I am not always successful, so, one must be tolerant.

I am happily married, so I am strictly looking for a friendly relationship, with a small group of men and women, as my husband, although keen in many of the things I like, also has other activities which I don't share. Hoping to hear from you soon.

G Martin
115 Carpenter St
BRIGHTON 3186.

Dear Grass Roots Readers,

I am writing to you on behalf of our small community at Graman NW NSW. We are in DESPERATE NEED OF A FAMILY (or two) with PRIMARY AGE SCHOOL CHILDREN. Like many small towns we are trying to keep two teachers at our school and require six children for next year. We have a lovely old homestead available with power, water, phone, a large garden, unfurnished, 1.7 kilometers from Graman. A primary school bus is available and a high school bus leaves from Graman.

The community itself is ½ hour from Inverell. We are very active, friendly country folk ready to welcome a family willing to join in community activities. There are two churches, a post office, the primary school, a hotel a community hall which is used for many functions including preschool and daycare service. Also a sportsground and keen tennis club which meets at weekends.

I hope this letter may inspire some family to consider joining us. We would prefer if the rent be worked out by giving us a couple of days' work as a builder or handyman. There is also a neighbour's cottage available for rent nearby. Anxiously awaiting any replies.

Lois Reardon
'Talasinga'
GRAMAN 2360.

Dear GR Readers,

We are wanting to obtain any literature or information regarding STILLIS. We are interested in buying a still to manufacture and experiment in all types of PLANT AND FRUIT OILS.

Paul and Jan Ward
'Carinya'
Petrie Creek Road
NAMBOUR 4560.

Dear Grass Roots,

In reply to Caroline in GR 59 — you seem to be reasonably sensible with your CATS, but I just have a few small points to make.

Roosting birds would be very easy for cats to catch and just because they don't bring any home doesn't mean they are not hunting them. You seem to be concerned about your females not making any unwanted kittens but your unspeyed tom could be mating with any feral females in the area and making lots of kittens. Man and his domestic animals, both herbivorous and carnivorous, have seriously unbalanced the Australian habitat since their introduction. No doubt a new balance will be achieved but at what an expense! Many of our wild creatures will have been eliminated by that time and carnivorous animals both feral and domestic will bear a large responsibility for that. I have nothing against domestic dogs and cats — I have both myself in suburbia — but unless completely restrained from visiting the bush and or belled in the case of cats, I do not believe they have a place in the country. If your cats can catch rabbits they are at least fully capable of destroying native wildlife as well. Dianne Briggs of Camberwell also in GR 59 had the right ideas.

Susan Davis
12 Alana Court
WANTIRNA SOUTH 3152.

Dear Readers,

So many folks have been helped immensely through feedback and others caring. Now we need some of that help too so any letters would really be appreciated. My husband, 3 children (6, 4½ and 2 years) plus another very unplanned baby on the way, are desperately battling to pay off a house, car and new tank. Also feed our family and keep our heads above water. Our house is on ¼ acre block surrounded by others' farms. We have very limited water (our 5000 gal tank is empty for lack of rain). Our two milking goats are now dry, the pot belly unused due to no chainsaw for wood.

Any ideas on nourishing, inexpensive meals, recycling family garbage, what fruit and vegies to grow when pipes and bath water continually freeze overnight and it's hot and dry in summer? Any little money saving ideas eagerly accepted. I sew, do many crafts but in our small town they don't sell as they used to. We don't mind hard work. Because our ultimate goal is to own a few acres and become as self sufficient as possible with four children, my husband is reluctant to set up alternative power till we get there, so is there any HELP FOR US? I will answer as many replies as I possibly can.

Ruth
RMB 92
Waukivory
VIA GLOUCESTER 2422.

Feedback Link-Up Feedback

Dear Nature Lovers,

Since returning from further camping travels around Oz, I find myself back in the big smoke and already suffocating! City life is getting me down, so I'm seriously considering selling what I've got and going bush, this time for good. On seeing thousands of acres unused, I'm hoping there may be some friendly country folk in NSW, that wouldn't mind sharing, renting or selling cheaply, one or two acres to a single lady (26) ASAP (possibly near water). My living standards are simple, caravan, shack, vegie garden, motorbike and sense of humour. I love the bush, fishing, riding, reading, music, animals and quiet times. Over ten years I was working in the computer industry and will scream if I see another one! Failing that, could anyone tell me of cheap caravan parks or non-fanatical Christian communities who would do the same?

Finally, if any lady riders are interested in TOURING parts of Oz, country rides or FORMING A GROUP, I'd like to hear from all soon.

Oh yeh! Where's Ginger Bartlett and Louisa Jordan gone?

Andrea
22/13 Busaco Rd
MARSFIELD 2122.

Dear Folks,

I am a happy lady, living life the way I like to. I've a lovely man and two beautiful young daughters, and for the past four years we have been enjoying life on our own land. As we live rather remotely I find it difficult to meet interesting people. I would LIKE TO WRITE to someone who although 'alternate' has a sense of humour and can still appreciate the finer things of life.

I am a gentle 31 year old Libran, decadent by nature and creative by choice. I enjoy people and miss the opportunity to socialise, so would like to find a few special people to write to. I was greatly influenced by the music and ideals of the late sixties and my philosophical tastes range from Frank Zappa, to John Seymour to D.H. Lawrence with a sprinkling of Fat Freddy in between.

As we have an essentially pagan outlook no 'Christians' please.

Linda
PO Box 707
LISMORE 2480.

Dear Grassrooters,

After reading *Grass Roots* and dreaming for seven years, I have finally settled into a simple life with no electricity or running water and best of all, lots of peace and quiet.

I wonder if anyone could help me with a horticultural enquiry. Does anyone know some FRUIT OR VEGETABLE VARIETIES which actually have FLAVOUR? I am concerned that most fruit varieties these days are designed to look very nice, but taste like cardboard. If anyone knows some names of varieties and/or suppliers of unusual varieties would you mind dropping me a line. Also, if anyone would like to write just for a yarn or to exchange a few ideas, feel free to write. Thanks for an inspiring magazine.

David Carr
'Gilthoniel'
Burns Rd
ARMIDALE 2350.



Dear Meg and David,

Knowing how helpful GR people are, I have a request. I am a qualified architectural draftsman and at last have an opportunity to work on a MUD BRICK DWELLING (to meet council requirements). The only hassle is I don't have very much info on such. Could you kind people please send me your experiences and technical advice (how to a certain MPA strength) etc., so I may be of help to my clients. My rates are very reasonable if anybody else requires my services and am willing to barter in lieu of cash.

We've formed here in the Brisbane Valley a 'Smallholder's' group for those who wish to learn more about the land and GR style things. Recently we held a field day on chainsaws, and yet to come are goats, fencing, smokehouse etc. We are a small but dedicated group of approx. 12 of all types, but are growing. Presently we meet in Esk and would welcome new members or visitors.

Laurie Wilson
'Cross Country Station'
MS 336
TOOGLOOLAWAH 4313.

Dear Readers,

Is there anyone at all who can IDENTIFY WITH ME and maybe write? Someone who perhaps has had a similar life and enjoys or hates the same things as I do. I am a 44 year old lady, still married, have brought up three children, two of whom are married. I am of slight build, sensitive, have been until recently very spiritually inclined. I find myself alone most of the time.

I am tired of being alone. I have been very sick with migraine since the age of fifteen and have been harshly persecuted because of it. Peace, happiness and rest help to keep it at bay, but unfortunately for me, happiness is rather rare in my life. But I do make sure now that I obtain rest. I love the peace and quiet of the bush, and can feel sympathy for animals as well as humans. I like open fires, and the sound of rain on the roof. I like going for walks, picnics, enjoy knitting, reading, outdoors. I hate football, television, hunting. I dislike loud people, exhibitionists, excessive talkers. I like cleanliness without being fanatical, don't drink or smoke.

Do other readers find that by middle age they have had enough of sitting home alone, forgotten by all until needed? Please, is there a gentle, caring, sincere person who will correspond with me and brighten my days? Thank you, one and all for hearing me out.

'Meg'
C/- Box 977
BAIRNSDALE 3875.

Dear GR People,

Another year has passed since I wrote to this page and you shared some of your generosity and every with me. Thank you Randolph for a wonderful year of stimulus, kindness and friendship.

After our visit to Tasmania (which we found beautiful but cold) we sold our 5 acre 'hobby farm' and bought a cheaper 14 acre block a bit further from Perth. The main reason for the move was to get out of the never ending mortgage trap and the vicious circle it perpetrates.

I am writing to you this time to see if anyone uses WORKING DONKEYS on their land? I have two donks broken to harness and I would like to be able to use them for ploughing and hoeing. My problem is that I do not know where to obtain implements or even what to look for. I have access to some wheelwrights' designs for horse drawn ploughs but I am not sure how to have them adapted to the smaller stature of the donkey. I am also interested as to whether people longrein their donks or lead them when ploughing? Hope someone out there can help.

I also need some help with HATCHING DUCKS' EGGS. Phil made the incubator in the recent GR and it has been a great success. I have hatched out 50 chicks and 1 turkey (hoping for more!) but have had no joy with the Muscovy eggs. They seem to start off fertile and then go bad. I wondered if a germ could be breeding in the incubating heat or whether I am doing something wrong?

Lindy Medcraft
Lot 1 101 Falls Drive
GIDGEGANNUP 6555.

Dear Grass Roots,

I would like to tell a little story (true) just told to me by my aunty.

Aunty Haner is now about 55 years old. As a child she knew real hunger, one of a large family, food was always scarce. There were orange trees growing in the nearest town, there were days that was all the children ate. They had a few custard apple trees growing and sometimes they had paw paw. She never knew sickness as a child.

When she was 15 years old she started her training as a nurse. They worked long hours and their staple food was mashed potatoes and gravy. With her small pay she had to buy stockings and text books. When she was eighteen her kidneys collapsed, she got pneumonia. The doctor gave her a course of antibiotics to be followed by another course and then yet another. Her health deteriorated. She has gone from one sickness to another and has depended on doctors and their bills all her life.

How many innocent victims have the doctors laid to waste. Don't be one of them! Truly FRUIT is our food fresh and in season. It will protect you, especially taken on an empty stomach and not mixed with cooked food. One organic orange has 26 essential elements in it. The body can only use all of these if the orange is eaten alone and on an empty stomach. All children love fruit.

Lee Perrett
'Juiatten'
C/- Post Office
MT MALLEY 4880.

Feedback Link-Up Feedback

Dear Friends,

I would like to thank you for our inclusion in the information available section of your great mag. (COMPANION PLANTING CHART). Unfortunately there has been one small oversight, in that the price of \$3.50 as printed is the price of our first edition of the chart not the second edition which we are currently selling for \$4.00 (as advertised in late Grassified Dec 86').

As it has now been printed we have no choice but to accept any orders for the chart at the stated price in the April '87 edition of *Grass Roots*. The only real difficulty we have is the concern for people who have already seen the previous advertisement in *Grass Roots* quoting a price of \$4.00 and subsequently paying that amount. I know we are talking about a difference of only 50 cents but we do try to keep our prices to a minimum and remain consistent in the eyes of the people who patronise us. Thanks for your magazine and its contributions.

Scott Shell, Maryanne Camillo
'Plum Products'
RMB 3635
GLENLYON 3461.

Dear GR Readers,

I would be most grateful if anyone could supply me with the address of someone who sells HAMMOCKS in or close to Melbourne. The hammock I seek is a brown/natural colour, generous in its proportions and in a natural fibre. This is a desperate plea from someone most amazed by the apparent scarcity of attractive, quality hammocks. Welcome your help.

Jennie Trezise
5/33 Eildon Rd
ST KILDA 3182.

Dear GR People,

I'm an absolute GOAT NUT and the first page I turn to whenever I pick up a copy of GR is 'Natural Goat Care'. I have Pat Coleby's book, but I wish I had a complete set of her GR articles. Finances won't run to buying every back issue — how about a booklet made up all the articles to date? I'm sure other goatkeepers would be interested — do write in if you would be and create a demand!

My herd now numbers 12 Toggenburg does and one Toggie buck who currently smells enough for a whole herd of his own! The girls are ruled over by a clever duo — I'm not exactly sure just who is herd-queen and I suspect they aren't either. Tiki, who is the younger of the two but has been here longer, was really bossed around by my other girl while still alive. So that when she was left with just a few kids and 'in control' she really blossomed from the timid little lady she used to be. When Lucky and her gang arrived I expected Tiki to lose any battle of wills — she was younger and a smaller goat as well. But she wasn't about to give up her new-found status and the two had many a battle. But they are now the best of friends and, as I said earlier, seem to have sorted out some kind of dual reign.

This place must be like a small piece of paradise for the goats — pine trees to provide a shady dry-underfoot, place to leg up in during the day and a tasty snack on arising; wattles, paperbark and native shrubs in profusion; sorrel and dandelion and native pastures in the morning then a quick hop through the horse fences to phalaris, clover, cocksfoot and other tasty treats. Not to mention fallen trees in profusion to play upon and wombat holes to explore for kids and goatlings. Can anyone explain why wombat holes hold such fascination?

C Molony
PO Box 182
MOSS VALE 2577.

Dear Meg,

A slightly different letter from normal but at the present time I am trying to do our family history and am asking for help from your readers. I am trying to find information on any DESCENDANTS FROM THESE PEOPLE.

Henry and Margaret Curran from Little River in Victoria, they had 14 children. Pierce and Matilda Tehane from around the Young district, they had four children. Last but not least, John Gardiner and Isabella Abernethy who moved from Tas to the Strathbogies in Victoria. William Spencer married their daughter Jane, they had 6 children. All help would be greatly appreciated.

P Curran
46 South Ck Rd
DEE WHY 2099.

Hi,

I have just experienced the most amazing wonderful time in my life — that being the BIRTH OF MY DAUGHTER. Only two years ago I experienced the most horrifically awful time in my life — that being the birth of my son. Both were born in public hospitals. Both times I wished for a homebirth. Both times my financial situation did not allow for this. I don't think my daughter's birth could have been made any better at home — everything went as I'd hoped for, my mind is still blown out. Soft lighting, soft music, my man, my very good friend, my son and two wonderful midwives helped me along my way. New Year's Eve brought to us the most wonderful sight and sound God could ever create, that of the new born. The difference between the two births is unbelievable. My son's birth, noise, lights, doctors, nurses, stirrups, forceps, forced gas, stitches, separation, horrific! My pelvis was supposed to be too small! Many other of you people have experienced either one or both of these births and I'd love to hear from those of you who would like to share your experience with me. Please do write. Lots of Love.

Colette Yoley
11 Sallsbury St
URALLA 2358.

Dear Readers,

Hope everyone is happy and ready for a great year. I have been reading *Grass Roots* for a bit over a year and like everyone else love it very much. It introduced me to a very special friend, Craig Melrose whom I owe a letter. I have just come back from a holiday from beautiful NZ and am settling down to normal again. I live on four acres and have about twenty chooks — a few too old to lay but I couldn't part with them. I also have a DOG which picks up heaps of TICKS so if anyone has a REMEDY for stopping them and getting them off properly I would be very grateful.

I live over the road from a very unusual CEMENT HOUSE called San Cementi, so if anyone wants some info about it I would only be too happy to help. Would anyone who is doing what feels good write to me from anywhere as I hope to travel around Australia.

Sonia
79 Bruce Cr
WARNERVALE 2259.

Dear People,

Grass Roots is a great magazine — it's the only one I have ever religiously bought, and I will continue to do so until either it stops or I stop! I have a small city block on which I am growing my first real crop of vegies — lots of goodies for truly spontaneous salads. Would anyone have some INTERESTING POTATO TUBERS? I am currently growing exotic species. And would anyone be able to put me on to the POULARD VARIETY OF WHEAT (for an overseas woman who asked about it in a seed collectors magazine).

Is there anyone offering FARM ACCOMMODATION in Victoria? I've checked out the Victour ones, and many of the units look like motels which I seek to avoid. A friend and myself are interested in something homely, with healthy cooking (i.e. fat and salt free), and privacy, we would respect yours too!

Yvonne Clarke
64 Hutton St
THORNBURY 3071.

Dear Grass Roots,

I have been reading your magazine for just under one year, after a friend introduced me to it. I found it extremely helpful in my last year of doing my horticultural certificate and wish I had known about this wonderful magazine, before hand. Besides writing to you about the magazine, I have two questions to put to your readers. Does anybody know how to PRESERVE BULLRUSH FLOWERS (Typha) which have a tendency to explode into a flowering mass, and with an enormous crop of SUNFLOWERS, what do I do with all the seeds I have collected? Some suggestions please. All the best to all of you, for now and the future.

Roslyn Gill
12 Villiers St
MERRYLANDS 2160.

Dear Meg,

Would you please advise us of any other Action Groups in Australia, who are opposed to FOOD IRRADIATION?

Cheryl Kelston
PO Box 107
NHULUNBUY 5797.



gumnut gossip



Megg Miller.

You can tell it's wintertime here without even looking out the office windows. There are gumboots by the door, an umbrella strategically dripping onto the news of the week and tell-tale muddy footprints across the lino. And there's usually at least one person standing around with their eyes crossed and knees tight together muttering 'I'd like to go . . . but it's too wet out there!' Sadly, our ablution block is a brisk walk away and whilst a pretty trip in spring and autumn it's positively dangerous in winter. It's been so wet this week there have even been jokes about rowing boats going round, but, with a little help from our trusty male and his shovel, much of the water has drained away. I suppose an outdoor loo is rather a novelty in this day and age, especially in the work situation, and although there is the occasional compensation to balance out the inconvenience, there's not one of us who wouldn't gladly 'trade up' on an indoor model right now.

The drive way into the office has always had a couple of low spots but with the rain we've had this month and the daily office traffic it hasn't taken long to develop into a quagmire. We're just grateful we haven't had any delivery trucks in! Driving in is said to be a little like negotiating an obstacle course between darting Guinea fowl, free ranging chooks and a duck that insists large puddles are duck ponds and therefore ducks have first priority to them. The staff all insist that Duckie won't move no matter how many times they beep and that they have to detour onto soft ground to avoid him. When the pet rabbit was alive it was known for diving in front of cars, causing the more highly strung staff mini heart attacks.

'Yes' they say, 'we have a lot to put up with', but this week's contribution beats all. And what have we done? Closed the front gate. It sounds piffing but if you have to drag a heavy metal gate (with an inbuilt tendency to flip on its side!) through the mud, drive in and then drag it back again it becomes the straw that broke the camel's back. Not, mind you, that we are trying to keep a camel in, or even the poultry, rather we're trying to keep the neighbours' persistent half grown heifer out. She's been in and out for weeks but now that the paddock is soft and the ground easily churned up, even one less animal will make a difference. She's been collected several times and put away but clearly prefers our cows to her sheepish mates, so the gate duty it is. I'll have to say this in small type or I risk being torn apart by my work mates — the gate is easy to open, but it takes a logical mind and strong arms. Just wish I was game to photograph some of the styles 'at work'.

We've been terribly busy these past two months. Kath our editor required further surgery and several weeks off to recuperate, so the rest of us have been flat out trying to absorb her work load. Kath's role here hasn't just been limited to editing magazine material but has included producing the *Book News* and carrying out lots of seemingly inconsequential little jobs. I say seemingly because it's not until you're faced with doing them yourself that you realise how time consuming the little jobs are. Kerry and I have virtually had to produce this magazine by ourselves — a massive task — and when we found we were getting really snowed under, advertised for help. We both said 'phew' when Glenys turned up to proofread and welcomed Kath back with open arms but decided they were both too late to save us from nervous breakdowns. Now we find we're both behind in answering our mail. If you've been awaiting a reply or an acknowledgement be patient a little longer, we'll sail forth into our mailbags as soon as possible.

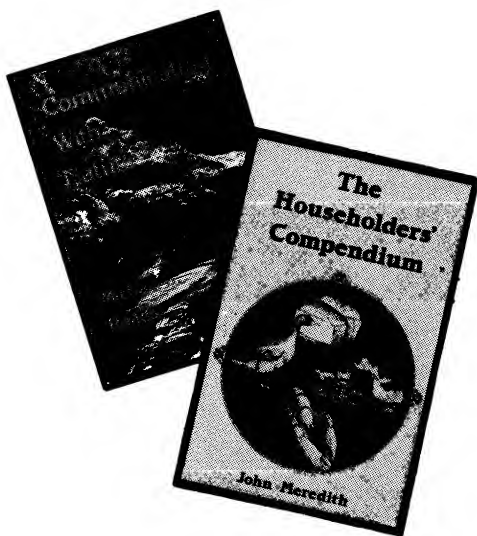
Naturally with all this work there's been no time for larking around or for morning teas or special cakes. However on days when everything has gone wrong and we've almost reached the end of our tether a tray of hot scones has miraculously appeared. David, the angel, has whipped up a mean batch with neither fuss nor mess. It's such a luxury to stop for a break and relax and eat — although we invariably end up in technical discussions on lightness and crumb texture or the merits of cream as a rising agent! Most of us are so grateful we heap the compliments upon our cook but Kerry, always a law unto herself, has stated that she can make bigger and better wholemeal scones. He's said he'd like to see them. We're calling it the scone bake off and you can look forward to hearing about this seriously contested event next issue.

The changes we spoke about last issue regarding the reduced size of GR seem to be working well. We agonised over them initially, concerned their impact would be deleterious but I guess by next issue no one will even notice them. I personally benefit from the changes most of all. Putting the mag together is backbreaking work — if you look at the number of words in it there is actually far more than in any other magazine. As some wit said last year 'more words per dollar'. Although we all work as a close and co-operative team the ultimate responsibility falls on me and less pages to work on has meant less stress and fewer late nights. I take this responsibility for GR seriously and know that if I'm not keen and on top of it all it's harder for Kerry, Anna and Kath. And GR is only as good as the people who put it into shape.

Still on the subject of noticing things, we'd like to acknowledge the effort so many of you have been making in keeping your Feedback letters short and clear. It makes such a difference to the amount of time we need to spend on them and eliminates the risk of us misinterpreting what's been written and re-editing right off the point. Thanks everyone, it's much appreciated.

This issue is a special one for me, a land mark you could say. Over the years friends and fellow workers have frequently asked how long I intended going on working the way I do. My stock answer had always been a rather jaunty 'Oh, I'll keep it up till I'm 40 and then I'll retire'. Suddenly I've found myself 40. Working toward a deadline every second month of your life is exhausting, restricting and detrimental to family life. I often jokingly say I only see six months of the year, the other six months being holed up in the office in a semi-comatose state. But I'm not going to retire, I love it all too much. I'll just have to take myself in hand and be more reasonable and realistic and more organised. Mind you I've been trying for years!

I always browse through the Feedback letters to find out how other people cope with stress, experiences with meditation and yoga, with diet, the spiritual path they've taken to find inner peace, and even just the little ways they're simplifying their lifestyle. And I never fail to become interested and inspired. I think what has me hooked on GR is that each issue reinforces the belief that I don't know it all. I can't dismiss this topic or that subject as 'been there and done that' because there is always more to it. Although we give priority to information in GR what comes through strongest are people. People who write and share, people looking, wanting, giving, and their personalities, attitudes, philosophy. It's so clear from the diversity of letters and articles that there's not just one type of person to be, one path to take, nor one way of doing things. I enjoy this rich smorgasbord so much and look forward to it for many issues to come.



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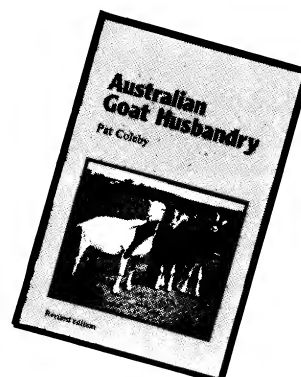
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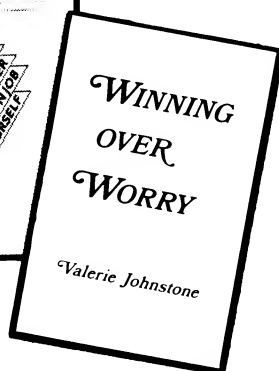
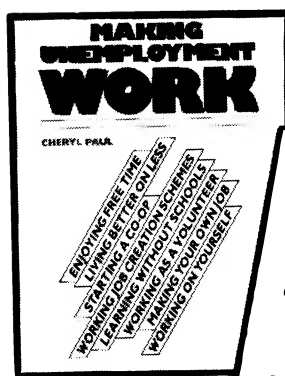


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